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THE

BOTANIST'S REPOSITORY,

FOR

NEW, AND RARE PLANTS.

CONTAINING

COLOURED FIGURES

OF SUCH PLANTS, AS HAVE NOT HITHERTO APPEARED
IN ANY SIMILAR PUBLICATION;

WITH ALL THEIR ESSENTIAL CHARACTERS, BOTANICALLY ARRANGED,
AFTER THE SEXUAL SYSTEM OF THE CELEBRATED LINNÆUS;

IN ENGLISH, AND LATIN.

TO EACH DESCRIPTION IS ADDED,

A SHORT HISTORY OF THE PLANT,

AS TO ITS TIME OF FLOWERING, CULTURE, NATIVE PLACE OF GROWTH,
WHEN INTRODUCED, AND BY WHOM.

THE WHOLE EXECUTED BY

HENRY ANDREWS,

AUTHOR OF THE COLOURED ENGRAVINGS OF HEATHS, IN FOLIO.

LONDON:

PRINTED BY T. BENSLEY,

AND PUBLISHED BY THE AUTHOR, N° 5, KNIGHTSBRIDGE.

To be had of J. WHITE, Fleet-street, and all the Booksellers.

1797.

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THE WHOLE ILLUSTRATED BY

HENRY DRESSER.



AUTHOR OF THE COLOURED FIGURES OF PLANTS.

LONDON:

PRINTED BY J. BARNARD.

AND FURNISHED BY THE AUTHOR, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

To be had of J. White, Bookseller, in the Strand.

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Vol. 1.

Of the
Botanists Repository

Comprising,

Coloured Engravings

of

New and Rare Plants

ONLY

With Botanical Descriptions &c.

in

Latin and English.

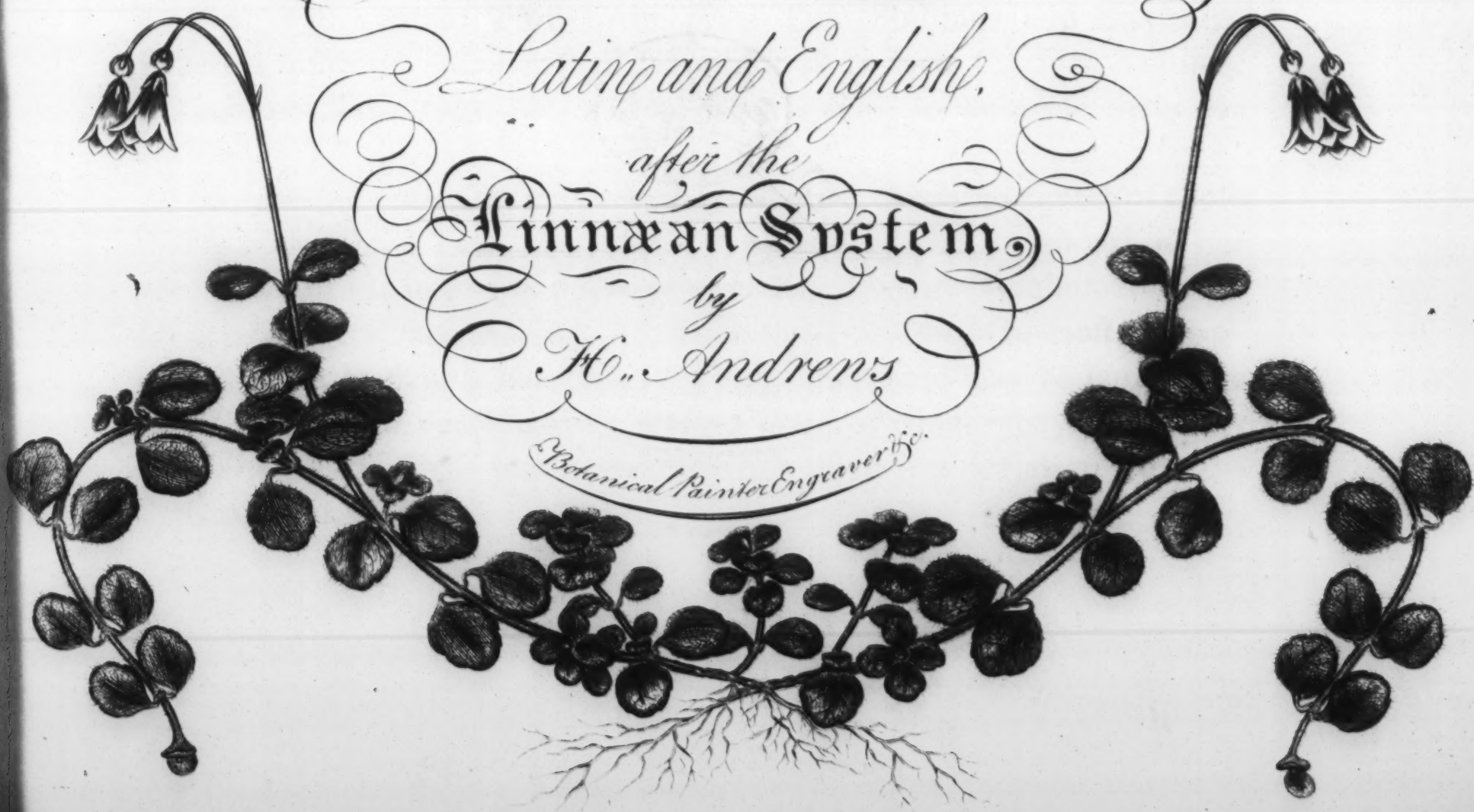
after the

Linnaean System,

by

H. Andrews

Botanical Painter Engraver &c.





TO THE PUBLIC.

OWING to the extended and liberal encouragement experienced by the Author, in his publication of the coloured Engravings of HEATHS, now far advanced; and being willing to avail himself of the moment in which every branch of the Science of BOTANY is most particularly patronized; he has undertaken this work, with the hopes (if its merits shall deserve it,) his endeavours, in this his second essay, may meet with similar success.

The Drawings from which the Engravings will be made, shall all be taken from living specimens, by the Author; and the dissection made whilst the flower is fresh, that the true characters, of the parts of fructification, may be the better ascertained.

On each Plate will be given the Dissections as taken in the drawings, numbered in reference to the Letter-press; the whole coloured to imitate drawings, as near as such a work will admit.

The appropriate Characters of every plant will be in Latin and English; the detail in English only. As the sexual system of Linnæus is the only one that will be considered in this work, the greatest regard will be had not to deviate from his principles, or arrangements, as to Class, Order, Generic or Specific Characters. All matter necessary to illustrate the subject, such as name, native place of growth, time of flowering, and culture, will be added.

The Letter-press will be printed by T. BENSLEY, on a fine wove Paper, Quarto size, to correspond with the Engravings, of which each Number will contain Three; the price Two Shillings and Sixpence. When a sufficient number shall be published to form the First Volume, an engraved Title-page, &c. will be given gratis, to complete them for binding.

In entering upon a Work, which is designed chiefly to consist of those Plants which have been the latest introduced to this kingdom; it has been thought fit, in giving a specimen of it in the first Number, to figure an old, but very rare, Alpine, which from its scarcity (to most cultivators) must at least be a new face, although the name may be familiar to many; that in the continuation, when a plant of equal rarity and beauty shall present itself, the purchasers may not think it a deviation from the original plan.

TO THE PUBLIC.

Owing to the extended and liberal encouragement experienced by the Author, in his publication of the coloured Engravings of *HEATHS*, now far advanced; and being willing to avail himself of the moment in which every branch of the Science of Botany is most particularly patronized; he has undertaken this work, with the hopes (if its merits shall deserve it) his endeavours, in this his second essay, may meet with similar success. The Drawings from which the Engravings will be made, shall all be taken from living specimens, by the Author; and the dissection made whilst the flower is fresh, that the true characters, of the parts or structure, may be the better ascertained.

On each Plate will be given the Distinctions as far as the drawings numbered in reference to the Letter-press; the whole coloured to imitate drawings, as near as such a work will admit.

The appropriate Characters of every plant will be in Latin and English; the detail in English only. As the textual system of Linnaeus is the only one that will be considered in this work, the general regard will be had not to deviate from his principles, or arrangements as to Order, Generic or Specific Characters. All names as far as possible, the Locality, such as name, native place of growth, time of flowering, and culture will be added.

The Letter-press will be printed by T. Baskett, on a fine paper. Paper, Quarto size, to correspond with the Engravings of which the Number will contain Three, the price Two Shillings and sixpence. When a botanical number shall be published to form the 1st volume, an engraved Title-page &c. will be given gratis to complete them to binding.

In consequence upon a *Wheat*, which is distinguished from the *Wheat* which have been the last introduced to the Kingdom, it has been thought fit in giving a specimen of it in the 2nd volume to place an old but very rare Alpine, which from its size and mode of growth, must at least be a new form, although the name may be applied to many; that in the continuation, when a plant of equal merit and beauty shall present itself, the publisher will not think it a deviation from the original plan.

P R E F A C E.

THE utility of this undertaking at a crisis, when the taste for Botanical pursuits so universally prevails, will, it is presumed, be readily admitted by all those engaged in them, whether as theorists, collectors, or cultivators. Such a work, under the immediate direction of some principal leader in the science, of this country, has been a desideratum of long expectation; but either from the great expence necessarily incurred, before any adequate return could be made, or from the trouble attendant on publications, where colouring forms so considerable a part, as yet, every similar attempt has proved abortive. The Bot. Mag. of Mr. Curtis, a work of singular merit in its way, has occasionally furnished, it is true, a few specimens of new plants; but the greatest part, as its title-page indicates, consists of those well known, common plants, long cultivated in our gardens; the direct reverse of the proposals and intentions of the author, in the prosecution of this. From a wish to prevent confusion, it was a determined principle at the outset of the work, not to give any generic or specific synonyms; but to follow the most generally accepted names, of known and named plants, without a cavil, of our best English botanists, or cultivators, if no flagrant error was perceptible, according to the Linnæan system: being satisfied, nothing contributed so much to repress the ardour of young botanists as the difficulty of affixing the right name to those plants, which, (from a captious desire in every publisher, to foist in something of his own coinage, upon the most trifling supposed difference,) have undergone several changes of title. If the plant was a certain novelty, with us, to have followed the sexual system, without a schism; upon that truly grand and comprehensive scale of nature; when the formation of a new genus was necessary; if not, to refer it to some one already made, if such was to be found, in any orthodox author: the specific name to be formed from some opposed, leading feature, in the habits of the different species of the genus. But although such were the Author's intentions, when he entered on this business, yet, from a wish to oblige many of the supporters of the work, who have signified a wish that synonyms should be given, an alphabetical Index, with all the various Synonyms collated from the best authorities, shall be printed separate for the use of those who may wish for such an addition.

As a fair excuse for the Author, (who throws himself upon the candour of the Public,) in extenuation of the inaccuracies which have, and will necessarily occur in the prosecution of the work, it is just to say, that the difficulties to be encountered, and of which none but those engaged in similar concerns can form any adequate idea, are incalculable; arising chiefly from the nature of a monthly publication, composed entirely of novelty, which cannot be anticipated, and of course, so very little time can be allotted for revival or correction. To remedy as far as possible such slips, a list of Erratæ will be given, with the Index, at the close of each volume.

KNIGHTSBRIDGE, Oct. 1799.

ERRATA, VOL. I.

- Plate 2. Springalia, lege, *Sprengelia*. Bloff. one leaf, read, *one petal*.
 Peri. 4-valvis, 4-locul. l. 5-val. 5-loc. S. V. 4 val. 4 cells, r. 5 val. 5 cells.
 3. Cor. æquila, l. *æqualia*. Emp. Sheath, r. *Sheaths*.
 7. Calyx, multiflorum, l. *multiflorum*.
 9. Calyx, diducis, l. *deciduis*. Stam. acumenatæ, l. *acuminatæ*.
 11. Sp. Ch. post roseis, inf. (,).
 12. Ord. II. r. IV. Seeds, become, r. *becomes*.
 14. Emp. cup, r. *sheath*. Poin. put (,) after beneath.
 15. Standard, cut, r. *cup*.
 20. Sem. acumenatæ, l. *acuminatæ*.
 23. Bloff. after spreading, put (,). No. 2 of Ref. put (*the*) before chives.
 25. Sp. Ch. post plenis, inf. (,).
 27. Ord. II. r. IV.
 30. Line 6th of Descr. leave out (*not*).
 37. Ord. II. r. IV.
 41. Bloff. one leaf, r. *one petal*; divided into fix, r. *with fix divisions*.
 47. Stam. post subulata, inf. (,).
 65. Emp. fruit-stalks, r. *fruit-stalk*.
 67. Descr. line 2d, for makes an addition to, r. *makes one of*.

PLATE I
CORTUSA MATTHIOLI

Alpine endemic

CLASS V. ORDER I

PENTANDRIA MONOGAMIA, THE CROCI

GENUS CORTUSA

CORTUSA MATTHIOLI (C. P. 1851) is a small, slender, perennial plant, with a single, upright, leafless stem, bearing a single, terminal, bell-shaped flower. The leaves are small, narrow, and linear-lanceolate, with a distinct midrib and a slightly revolute margin. The flowers are small, with a long, slender tube and a five-lobed corolla. The fruit is a small, globose capsule, with a persistent style.

CORTUSA MATTHIOLI is a very rare plant, known only from a single locality in the Alps. It is a very delicate plant, and is easily destroyed by the foot of the tourist. It is a very beautiful plant, and is a great addition to the Alpine flora.

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PLATE I.
CORTUSA MATTHIOLI.
Alpine Sanicle.

CLASS V. ORDER I.
PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quinquefidum, persistens; laciniis obtusis, concavis.
COROLLA. Monopetala, rotata, quinquepartita, laciniis sub-rotundis, ad quarum basin prominent tubercula quinque.
STAMINA. Filamenta quinque brevia. Antheræ bipartitæ, oblongæ, erectæ, exteriori parte affixæ.
PISTILLUM. Germen ovatum. Stylus filiformis. Stigma simplex.
PERICARPIUM. Capsula ovata-oblonga, utrinque longitudinaliter fulcata, unilocularis, apice quinquevalvi, valvularum marginibus involutis.
SEMINA numerosa, oblonga, scabra.

EMPALEMENT. Cup with five divisions, permanent; the segments blunt, and concave.
BLOSSOM. One leaf, wheel-shaped, five divisions, segments nearly round, having five prominent tubercles at their base.
CHIVES. Five short threads. Tips divided in two, oblong, upright, and fixed to the blossom by their backs.
POINTAL. Seed-bud egg-shaped. Shaft thread-shaped. Summit simple.
SEED-VESSEL. Capsule oblong egg-shaped, channelled on each side, of one cell, the top has five valves, which are turned inward at their margins.
SEEDS many, oblong, and rough.

SPECIFIC CHARACTER.

Cortusa, foliis cordatis, laciniatis, petiolatis; calycibus corolla brevioribus.

Sanicle, with heart-shaped jagged leaves that have foot-stalks; empalements shorter than the blossoms.

REFERENCE TO THE PLATE.

1. The Empalement, and Fruit-stalk.
2. The Blossom cut, and spread open, to expose the situation of the Chives.
3. The Pointal, magnified.

THIS beautiful little herbaceous plant, a native of the Germanic Alps, was known to, and described by all the elder, as well as modern botanical theorists; yet till this time, has there not been one good representation of it. Having been nearly lost to us for a number of years, it may be considered as deserving a place amongst those plants we deem rare; as a specimen of such it has been given. It delights much in shade; is perfectly hardy; thrives best in a light but pure soil; as dung, or other mixtures, are apt to rot the roots when in a state of inaction; flowering in May and June, and producing seeds. But the surest mode of propagation is by the root, which may be divided with success about September.

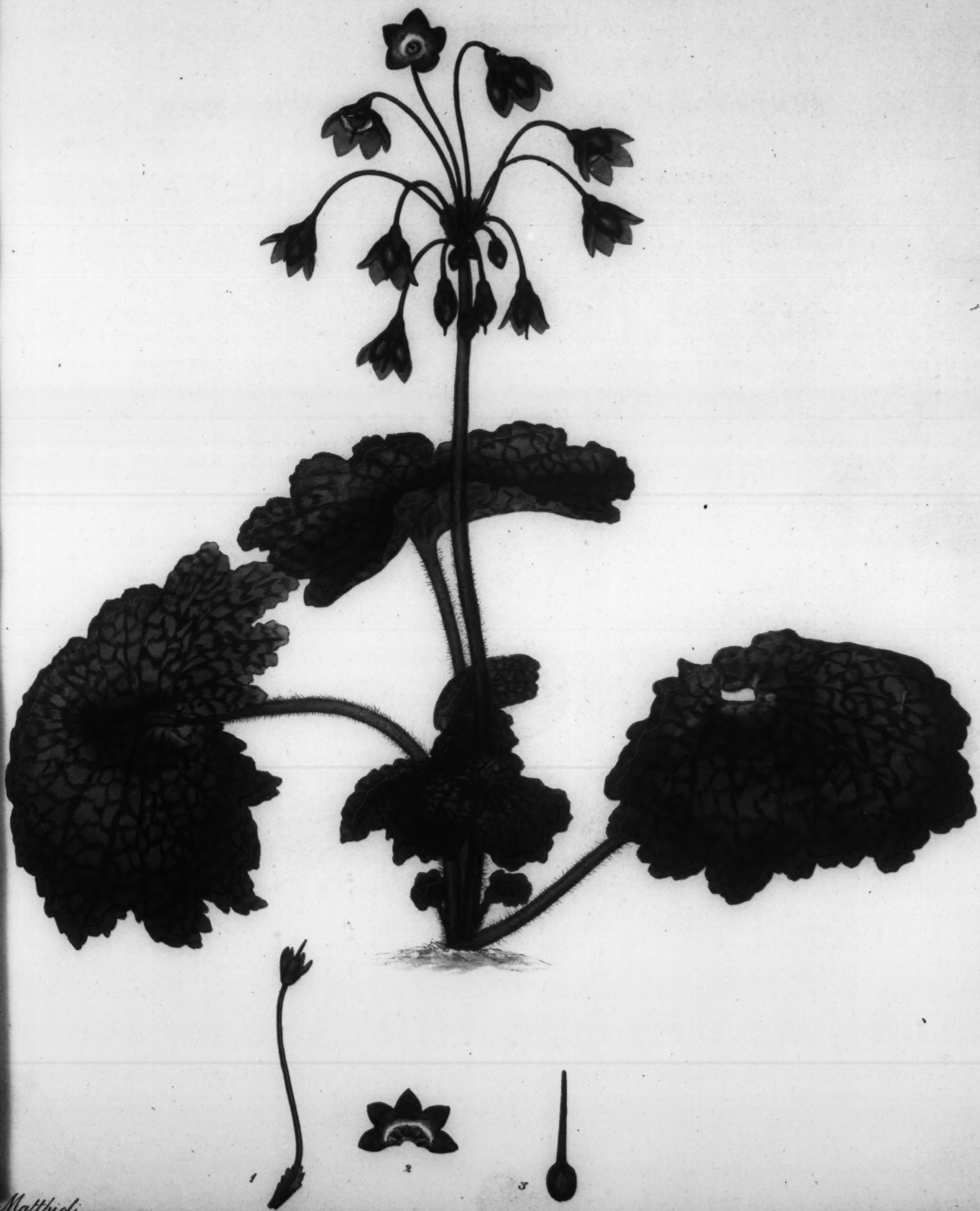


PLATE II.
 SPRINGALIA INCARNATA.

Star-flowered Springalia.

CLASS XIX. ORDER VI.

SYNGENESIA MONOGAMIA. Tips united. Flowers simple.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquefidum, persistens.

COROLLA. Monopetala, quinquefida, rotata, laciniis acumenatis.

STAMINA. Filamenta quinque, lineares, receptaculo inserta. Antheræ pilosæ, erectæ, connatæ in cylindrum.

PISTILLUM. Germen superum, turbinatum. Stylus filiformis. Stigma obtusum.

PERICARPIUM. Capsula quadrivalvis, quadrilocularis.

SEMINA plurima, minima, rotunda.

EMPALEMENT. Cup one leaf, cut into five segments, and remaining.

BLOSSOM. One leaf, cut into five segments, wheel-shaped, the divisions sharp pointed.

CHIVES. Five threads, linear, fixed into the receptacle. Tips hairy, upright, united into a cylinder.

POINTAL. Seed-bud above, turban-shaped. Shaft thread-shaped. Summit blunt ended.

SEED-VESSEL. Capsule four valves, four cells.

SEEDS many, small, and round.

SPECIFIC CHARACTER.

Springalia, foliis alternis, amplexicaulibus, mucronatis; corollis sub-folitariis, incarnatis, rigidis, micantibus.

Springalia, with alternate leaves, embracing the stem, and sharp pointed; blossoms mostly single, flesh-coloured, harsh, and shining.

REFERENCE TO THE PLATE.

1. The Empalement, (natural size).
2. The Blossom divided from the Empalement.
3. The Chives, Pointal, and Seed-bud, (magnified).
4. The Seed-vessel, and Pointal, (magnified).

THE *Springalia*, must certainly rank among the most beautiful of the various new genera which have been introduced from New Holland; the delicacy, brilliancy, and number, of its blossoms render it particularly attractive, whilst their extreme permanency adds greatly to its merits; the flower being of such singular durability, as to retain nearly the same appearance when the seeds are perfected, as at their first opening. The figure before us, was taken from a plant in the nursery garden of Messrs. Lee and Kennedy, Hammer-smith, who raised it from seeds about three years since, and where it has flowered these two successive years. The Botany-bay plants, (as they are generally called) are best preserved in the greenhouse; but although this is sufficiently hardy for such treatment, yet its situation must be dry, being very susceptible of damps, flourishing best in sandy peat earth; continues flowering through the whole summer; and propagates easily by cuttings. The characters, and habit of this genus, like almost all the plants from New Holland, being perfectly new, there was a necessity to form a fresh generic name for it; which has been done by the deservedly eminent Dr. J. E. Smith, botanical professor, and president of the Linnæan Society.

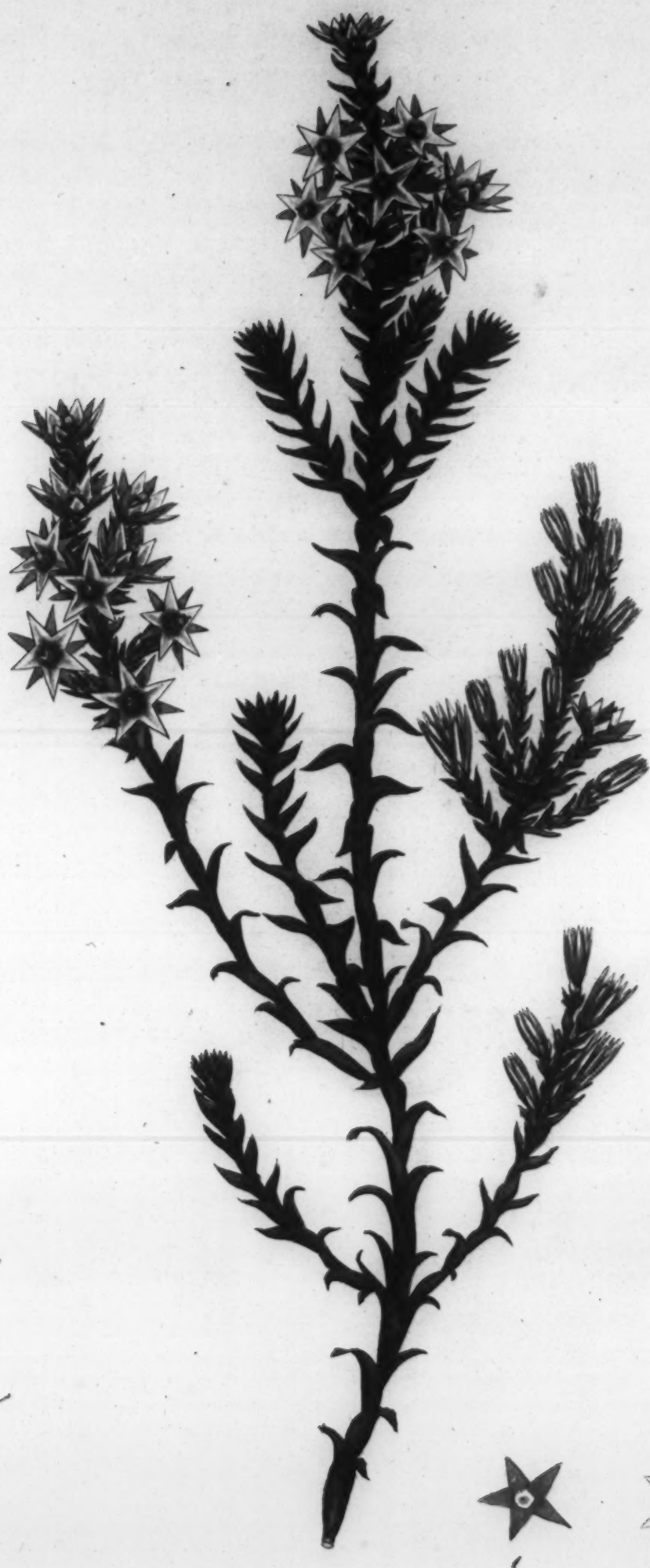


PLATE III.
NEOTTIA SPECIOSA.

Flesh-coloured Neottia.

CLASS XX. ORDER II.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

GENERIC CHARACTER.

CALYX. Spathæ vagæ. Spadix simplex

COROLLA. Petala quinque, longitudine æquila, anguste-lanceolata, erecta.

Nectarium monophyllum, indivisum, acuminatum, intra petala interiora positum, basin styli femiamplectens, erectum, superne patulum.

STAMINA. Filamenta duo, ex limbo styli dorsali orta, lanceolata. Antheræ duæ, lineares, longæ, locatæ in loculum filamenti.

PISTILLUM. Germen inferum, curvatum, falcatum, inferne attenuatum. Stylus crassus, adnatus labio superiori nectarii. Stigma obsoletum.

PERICARPIUM. Capsula unilocularis, carnosæ, longissima, trivalvis.

SEMINA numerosa, minutissima.

EMPALEMENT. Sheath scattered. Fruit-stalk simple.

BLOSSOM. Petals five, of equal length, of a narrow spear-shape, and upright.

Honey-cup one leaf, undivided, sharp pointed, placed between the two inner petals, half embracing the base of the shaft, upright, spreading at the top.

CHIVES. Two threads, rising out of the back of the shaft, spear-shaped. Tips two, linear, long, placed in the cells of the threads.

POINTAL. Seed-bud beneath, curved, furrowed, tapering at the base. Shaft thick, growing to the upper lip of the honey-cup. Summit indistinct.

SEED-VESSEL. Capsule with one cell, fleshy, very long, three valves.

SEEDS numerous, very small.

SPECIFIC CHARACTER.

Neottia, foliis radicalibus, undulatis, lato-lanceolatis, basi attenuatis; floribus confertis, spicatis, incarnatis, speciosissimis.

Neottia, with leaves growing from the root, waved, of a broad spear-shape, tapered at the base; flowers pressed together in a spike, flesh-coloured, and most beautiful.

REFERENCE TO THE PLATE.

1. A Blossom, Seed-bud, and Sheath, (natural size).
2. The Seed-bud, and three Petals of the Blossom; the two inner cut out, to shew the position of the Honey-cup, (natural size).
3. Seed-vessel, and Honey-cup magnified; shewing the situation, and shape of the Chives, within the Honey-cup.
4. The same magnified; shewing the situation of the Pointal, at the back of the Honey-cup.

PROFESSOR Jacquin of Vienna, having figured the Neottia in the third volume of his Collectanea, with justice has determined it a new genus, and given it the name it here bears; the whole habit of the plant being entirely dissimilar to any old genera. It certainly must be placed somewhere near Limodorum, or Epidendron, from either of which, however, it stands perfectly distinct. This is the only species yet in England, and was introduced from the island of Jamaica, about the year 1793, by the Hon. Mrs. Barrington. The drawing from which the present figure is taken, was made (by her kind permission) from a plant in the extensive collection of the Hon. Lady Archer, Ham-common. Like all plants from that island, it requires the heat of a pine-stove, and rich earth, to make it flourish; is increased by the root, and flowers in the early part of the year.



Neottia speciosa

Drawn by Engmann & Pichler as the Act. director.
Not. 1797. by H. Andrews & S. Knightbridge.

PLATE IV.
RHODODENDRON DAURICUM.

Dauric Rhododendron.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX quinquepartitus, persistens.
COROLLA. Monopetala, rotato-infundibuliformis: limbo patente; laciniis rotundatis.
STAMINA. Filamenta decem, filiformia, longitudine corollæ, declinata. Antheræ ovales.
PISTILLUM. Germen pentagonum, retusum. Stylus filiformis, longitudine corollæ. Stigma obtusum.
PERICARPIUM. Capsula ovata, quinquelocularis.
SEMINA numerosa, minima, lineares.

EMPALEMENT of five divisions, and remaining.
BLOSSOM. One leaf, of a roundish funnel-shape: the limb spreading; and its segments rounded.
CHIVES. Ten hair-like threads, the length of the blossom, bent downward. Tips oval.
POINTAL. Seed-bud five-sided, and dented. Shaft thread-shaped, the length of the blossom. Summit blunt-ended.
SEED-VESSEL. Capsule oval, five-celled.
SEEDS many, small, and linear.

SPECIFIC CHARACTER.

Rhododendron, foliis glabris utrinque nudis, petiolis longissimis; corollæ violaceæ, foliis ampliores, rotatæ.

Rhododendron, with smooth leaves, naked on both sides, and long foot-stalks; the blossoms light purple, larger than the leaves, and wheel-shaped.

REFERENCE TO THE PLATE.

1. The Blossom, (natural size).
2. The Chives, and Pointal, (natural size); one tip detached, (magnified).
3. The Seed-vessel, and Pointal, (magnified).

ALTHOUGH this shrub has been described, and is well known to botanists, it has not, till within these very few years, been seen in Great Britain. It is a perfectly hardy plant, being a native of the coast of the Black and Caspian seas, and parts adjacent; from whence it has been conveyed to Petersburg by Dr. P. Pallas, and figured by him in his *Flora Russica*. Mr. Bush was the person who brought it to England, on his return from Russia. The flowers begin to appear in the month of March, continuing through April and May. As yet (from its scarcity) the best method of cultivating it can scarcely be known; but it seems to like a sheltered situation, and light soil, like most of the genus; and has been increased by layers. The drawing was made from a plant, at the nursery of Messrs. Lee and Kennedy, Hammer-smith.



Rhododendron dauricum.

*Drawn from a specimen of the plant
collected by Mr. H. B. Kuhn at Khabarovsk.*

PLATE V.
GLADIOLUS LONGIFLORUS.

Long-flowered Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves.
COROLLA, sexpartita, ringens. Petala oblonga, omnia unguibus in tubum conata.
STAMINA. Filamenta tria, subulata, divisuris alternis petalorum inserta. Antheræ oblongæ.
PISTILLUM. Germen inferum. Stylus simplex, longitudine staminum. Stigma trifidum, concavum.
PERICARPIMUM. Capsula oblonga, obtusa, trilobularis, trivalvis.
SEMINA plura, subrotunda.

EMPALEMENT. Sheath two valves.
BLOSSOM, cut into six segments, and gaping. Petals oblong, having all their claws connected into a tube.
CHIVES. Three threads, awl-shaped, fixed into each alternate division of the petals. Tips oblong.
POINTAL. Seed-bud beneath. Shaft simple, the length of the chives. Summit divided in three, and concave.
SEED-VESSEL. Capsule oblong, obtuse, three cells, three valves.
SEEDS many, nearly round.

SPECIFIC CHARACTER.

Gladiolus, foliis ensiformibus, plicatis, villosis; corollis tubiformibus, longissimis; petalis undulatis, reflexis.

Gladiolus, with sword-shaped, plated, hairy leaves; blossoms trumpet-shaped, and very long; petals waved, and bent back.

REFERENCE TO THE PLATE.

1. A Blossom cut open, to shew the situation, and insertion of the Threads; the Threads, and Tips, remaining attached.
2. The Seed-bud, Shaft, and its Summit.

THIS species of Gladiolus, (as are most of the genus) is a native of the Cape of Good Hope, about Table Mountain; where the roots of Ixia, Antholyza, Gladiolus, &c. form a chief part of the food of the inhabiting monkeys. It came to England amongst many other roots and seeds of beautiful and rare plants, collected by J. Pringle, Esq. of the island of Madeira, when on an excursion at the Cape; and sent by him to Messrs. Lee and Kennedy, of Hammer-smith. Like most bulbs, it has its period of rest; during which, it should be kept without moisture, but whilst growing, requires abundance; flowering about June, or July, and producing good seeds. It should be treated as a greenhouse plant, and planted in light sandy earth. Like the Crocus, the old root perishing, a number of fresh ones are produced, which may, (if thought necessary) be kept out of the ground two or three months.



Iris longiflorus.

Drawn & Engraved by Published in the Cat. about Dec. 1. 1797
by H. Andrews & J. Knightbridge.

PLATE VI.
HEMEROCALLIS CÆRULEA.
Blue Day Lily.

CLASS VI. ORDER I.
HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Nullus.
COROLLA, sexpartita, infundibuli-campanulata.

STAMINA. Filamenta sex, subulata, longitudine corollæ, declinata; superiora breviora. Antheræ oblongæ, incumbentes, affurgentes.

PISTILLUM. Germen fulcatum, superum. Stylus filiformis, longitudine et situ staminum. Stigma obtuse-trigonum, affurgens.

PERICARPIUM. Capsula trigona, trilocularis, trivalvis.
SEMINA plurima, subrotunda.

EMPALEMENT. None.
BLOSSOM, has six segments, of a funnel bell-shape.
CHIVES. Six awl-shaped threads, the length of the blossom, bent downwards; the upper ones the shortest. Tips oblong, fixed by their sides, and turned up at the ends.
POINTAL. Seed-bud furrowed, and above. Shaft thread-shaped, of the length and position of the chives. Summit bluntly three-cornered, turned up at the point.
SEED-VESSEL. Capsule three-sided, three cells, three valves.
SEEDS many, nearly round.

SPECIFIC CHARACTER.

Hemerocallis, foliis cordatis, petiolatis; corollis cæruleis.

Day Lily, with leaves that are heart-shaped, and have foot-stalks; the blossoms blue.

REFERENCE TO THE PLATE.

1. The Chives, and Pointal, as placed in the Blossom.
2. The Seed-bud, Shaft, and Summit.
3. A Seed of the shape and size when ripe.

THE variety of character exhibited in this new species of Hemerocallis, so different from its congeners, in foliage, flower, and seed; would almost induce us to think like Gärtner, a generic division necessary; if we were not withheld, by that strong rule of Linnæus, (from which, it will be a leading feature of this work, not to swerve) not to increase the number of genera, but where absolutely necessary. This species, as well as a white variety, which has been figured by Kämpfer; and continued since him by Welldenow, in his new Species Plantarum, under its present denomination; is a native of China, and introduced to our gardens from thence by G. Hibbert, Esq. of Clapham, from whose most extensive and beautiful collection this specimen was taken. It is as yet cultivated as a hothouse plant, where it flowers in the spring months, perfecting its seeds: perhaps when better known, it may be found, like many Chinese plants, to bear our climate. It is propagated as well by parting its roots, as from the seeds.



Homocallis caerulea.

Drawn & engraved & published as the best novel Dec. 1. 1897
by H. Andrews & E. Knightbridge.

PLATE VII.
PRIMULA CORTUSOIDES.
Siberian Primrose.

CLASS V. ORDER I.
PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Involucrum polyphyllum, multiflorum, minimum. Perianthium monophyllum, tubulatum, pentagonum, quinque-dentatum, acutum, erectum, persistens.

COROLLA. Monopetala. Tubus cylindraceus, longitudine calycis, terminatus colo parvo hemisphaerico. Limbus patens, semi-quinquefidus; laciniis obcordatis, obtusis. Faux pervia.

STAMINA. Filamenta quinque, brevissima, intra collum corollae. Antherae acumenatae, erectae, conniventes, inclusae.

PISTILLUM. Germen globosum. Stylus filiformis, longitudine calycis. Stigma globosum.

PERICARPIUM. Capsula teres, longitudine fere perianthii, unilocularis, dehiscens apice decem dentato.

SEMINA numerosa, subrotunda. Receptaculum ovato-oblongum, liberum.

EMPALEMENT. Fence of many leaves, including several flowers, and small. Cup one leaf, tubular, five-sided, five-toothed, sharp, upright, and remaining.

BLOSSOM. One petal. Tube cylindrical, the length of the cup, terminated by a short hemispherical neck. Border spreading, half cut into five divisions; the segments are inversely heart-shaped, and blunt. Mouth open.

CHIVES. Five threads, very short, within the neck of the blossom. Tips pointed, upright, approaching, within the tube.

POINTAL. Seed-bud globular. Shaft thread-shaped, the length of the cup. Summit globular.

SEED-VESSEL. Capsule cylindrical, nearly as long as the cup, of one cell, opening at the top, with ten teeth.

SEEDS numerous, and roundish. Receptacle oblong egg-shaped, and loose.

SPECIFIC CHARACTER.

Primula, foliis petiolatis, cordatis, sub-lobatis, crenatis; corollis laetè purpureis.

Primrose, whose leaves have foot-stalks, are heart-shaped, slightly lobed, and scalloped; blossoms of a bright purple.

REFERENCE TO THE PLATE.

1. The Cup, and Fruit-stalk.
2. A Blossom cut open, to shew the situation of the Chives, and its internal formation.
3. The Seed-bud, Shaft, and Summit, (magnified).

THIS species of *Primrose* is figured by Gmelin, in his *Flora Siberica*. It was in the year 1794, that the seeds of this plant were sent by Professor P. Pallas, from Siberia, to Messrs. Lee and Kennedy, of Hammer-smith; at whose nursery the drawing of this most charming plant was made: though a native of so cold a clime, it seems with difficulty to endure the severity of ours; thriving best in a pot, under any slight shelter, or a very dry situation if planted out: it is increased by the root, which should be parted in March; and flowers in June, and July.



Primula Cortusoides.

From a drawing by Robert Smith del. et sculp. Jan. 1840.
by H. Andrews Sc. Knightbridge.

PLATE VIII.
GLADIOLUS ALATUS.

Wing-flowered Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves.

COROLLA, fexpartita, ringens. Petala oblonga, omnia unguibus in tubum conata.

STAMINA. Filamenta tria, subulata, divisuris alternis petalorum inserta. Antheræ oblongæ.

PISTILLUM. Germen inferum. Stylus simplex, longitudine staminum. Stigma trifidum, concavum.

PERICARPIMUM. Capsula oblonga, obtusa, trilocularis, trivalvis.

SEMINA plura, subrotunda.

EMPALEMENT. Sheath two valves.

BLOSSOM, of six divisions, and gaping. Petals oblong, having their claws formed into a tube.

CHIVES. Three awl-shaped threads, fixed into the alternate divisions of the petals. Tips oblong.

POINTAL. Seed-bud beneath. Shaft simple, the length of the chives. Summit cut into three, and concave.

SEED-VESSEL. Capsule oblong, blunt ended, three cells, three valves.

SEEDS many, nearly round.

SPECIFIC CHARACTER.

Gladiolus, foliis ensiformibus, costatis; petalis lateralibus latissimis.

Gladiolus, with sword-shape, ribbed leaves; the side petals of the blossom the broadest.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement, with the Chives, detached from the Petals, as they stand in the Blossom, and apparently attached to each other; with the natural position of the Pointal.
2. The Chives, Pointal, and Seed-bud; one of the divisions of the Summit magnified.

THIS species of Gladiolus, although so scarce with us, is certainly one of the most common found near Cape Town; and, notwithstanding its extreme beauty, has been overlooked by most collectors; who, from its great frequency, have generally considered it as forming, undoubtedly, part of every collection of exotics. It is of an extreme delicate nature, and overmuch wet easily destroys it; differing from most Cape bulbs, in requiring a light loamy earth, and the assistance of a dry stove, to make it flower well; which it will do by such aid, about May, or June; seldom producing seeds, and propagating but slowly by the root. From the fugitive character of this plant, it is difficult to ascertain the first cultivator; for although it does not appear amongst the Gladiolus in the Hortus Kewensis, it must undoubtedly have come into that immense collection at different periods, but never flowered; which is the reason we do not find it there described, which has been done by Linnæus, in his Species Plantarum, under the name it here bears; as well as by Plukenet, in his Phyto-graphia, and others under various synonyms. This figure was taken from a plant that flowered at Messrs. Lee and Kennedy's in 1796.



Gladiolus alatus.

Drawn Engraved & Published as the Act directs
 Jan 2^d 1792. by H. Andrews N^o 5. Thavghtsbridge.

PLATE IX.
ATRAGENE CAPENSIS.

Cape Atragene.

CLASS XIII. ORDER VII.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

GENERIC CHARACTER.

CALYX. Perianthium tetraphyllum; foliolis ovalibus, patentibus, obtusis, dicitur.
COROLLA. Petala duodecim, linearia, basi angustissima, obtusa, patula.
STAMINA. Filamenta plurima, brevissima. Antheræ oblongæ, acumenatæ.
PISTILLUM. Germina plurima oblonga. Styli villosi. Stigmata simplicia, longitudine antherarum.
PERICARPIUM. Nullum.
SEMINA plurima, definitia in caudam pilosam.

EMPALEMENT. Cup four-leaved, which are oval, spreading, blunt, and deciduous.
BLOSSOM. Petals twelve, linear, narrowest at base, blunt, and spread open.
CHIVES. Threads many, very short. Tips oblong, pointed.
POINTAL. Seed-buds numerous, oblong. Shafts hairy. Summits simple, the length of the tips.
SEED-VESSEL. None.
SEEDS many, terminating in a hairy tail.

SPECIFIC CHARACTER.

Atragene, foliis ternatis; foliolis incisis, dentatis, rigidis; flore incarnato, semipleno.

Atragene, with three divisions; the smaller divisions jagged, toothed, and harsh; the flower flesh-coloured, and semidouble.

REFERENCE TO THE PLATE.

1. A Petal cut off close to the receptacle.
2. The Fruit-stalk, Chives, and Pointals; the Chives thrown to one side, to expose the situation of the Pointals; one tip magnified.
3. A Seed of the size when ripe.

THIS plant has been considered by Burmann, Hermann, and other Cape botanists, as an *Anemone*, to which genus it certainly may as easily be referred as *Atragene*: but as it has been clearly described by Linnæus, under that genus, we have not hardness enough to dispute his authority. It is (as the trivial name implies) a native of the Cape of Good Hope, but at some considerable distance within land; whence it requires a dry stove to preserve it, suffering much from damps. It is only since the year 1795, that this plant has been found in our greenhouses; being then introduced by Messrs. Lee and Kennedy, nurserymen, where it has flowered and perfected seeds; which seems to be the only means of propagating it: the soil it prefers is a mixture of peat and loam; flowering about March, or April.



Atragene Capensis.

Collected in Jan'y 1838 by H. Johnston
N. C. Wright.

PLATE X.
ARISTEA CYANEA.

Blue-flowered Aristeia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves, laceræ, persistentes.
COROLLA, hexapetala, oblonga, æqualia, obcordata, persistentia, patens.
STAMINA. Filamenta tria, erecta, subulata. Antheræ sub-simplices, magnæ.
PISTILLUM. Germen inferum. Stylus filiformis, erectus. Stigma trifidum, concavum, reflexum.
PERICARPIUM. Capsula oblonga, triquetra, trilocularis, loculis compressis, trivalvis.
SEMINA plura, compressa, scabrida, sub-semicircularia.

EMPALEMENT. Sheath two valves, ragged, and remaining.
BLOSSOM, of six petals, oblong, equal, inversely heart-shaped, remaining, spreading.
CHIVES. Three threads, upright, awl-shaped. Tips almost simple, and large.
POINTAL. Seed-bud beneath. Shaft thread-shaped and erect. Summit cut into three, concave and reflected.
SEED-VESSEL. Capsule oblong, three-sided, three cells, cells compressed, three valves.
SEEDS many, flat, rough, nearly semicircular.

SPECIFIC CHARACTER.

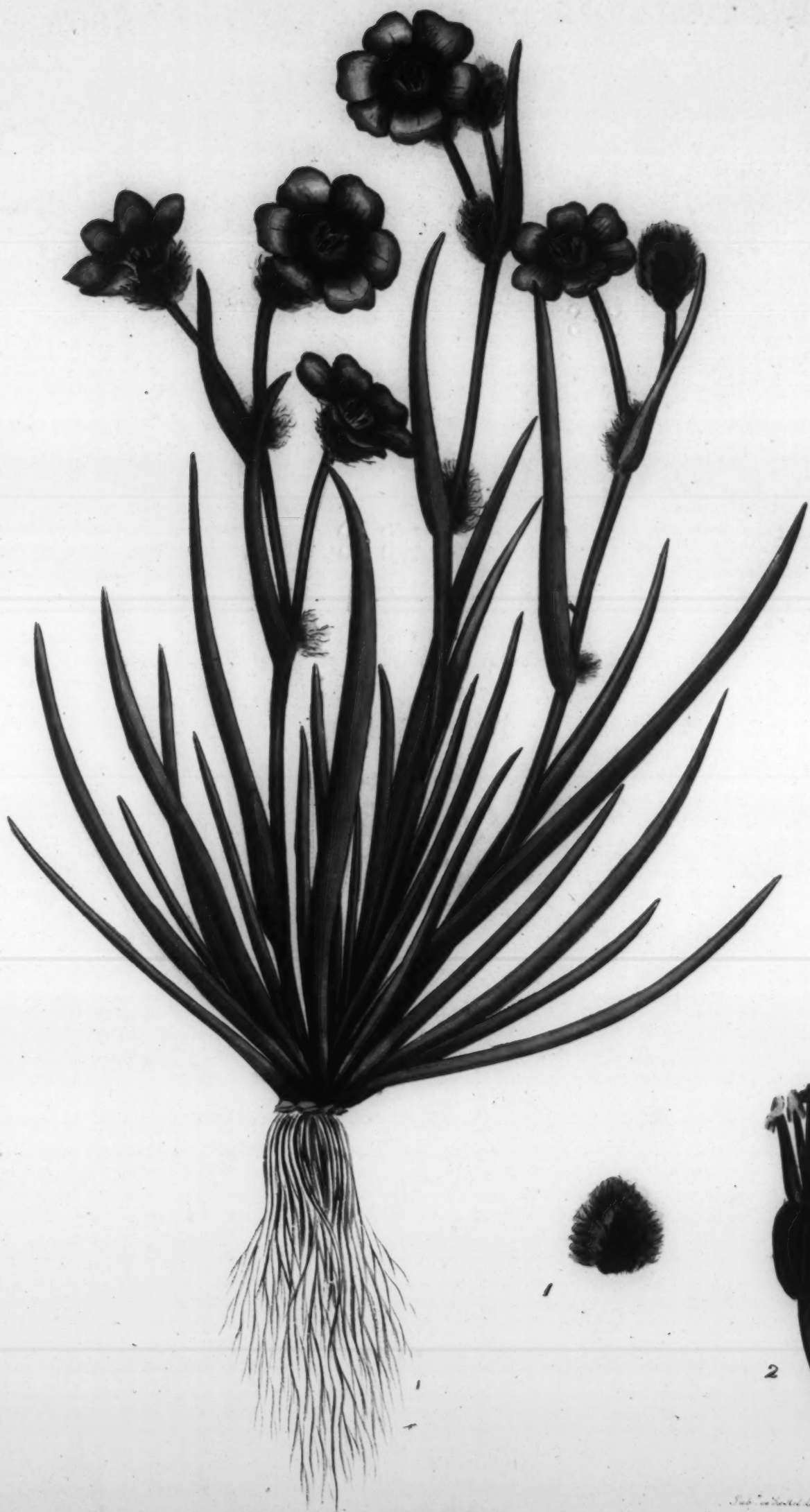
Aristea, foliis ensiformibus, radicalibus; floribus capitatis, cyaneis.

Aristea with sword-shaped leaves growing from the root; the flowers grow in heads, and are of a bright blue.

REFERENCE TO THE PLATE.

1. A Valve of the Sheath spread open.
2. The Chives, Pointal, and Seed-bud, (magnified.)
3. A perfect Seed, (magnified.)

THE *Aristea* is a native of the Cape of Good Hope, and has been described under various synonyms; by Plukenett as a *Gramen*, by Petiver as *Bermudiana Capensis*, and by Van Royen, Burmann, and Linnæus, as an *Ixia*. But although differing from Linnæus is against the fixed intention of this undertaking, where there is a possibility of avoiding it; yet in this instance of alteration he must have acquiesced, having undoubtedly never seen the plant himself. The blossom, seed-vessel, seeds, habit, root, and growth, of the plant, so totally differ from the character of *Ixia*, &c. that we have not hesitated, in accepting the name given it in the *Hortus Kewensis*; where, it is said to have been introduced, to that collection, by Mr. F. Masson in 1774; though no specific description is given of it; from which we may conjecture, it never flowered there. The figure here given, was taken from a plant which flowered at Messrs. Lee and Kennedy's, in 1797. The *Aristea* being rather a delicate plant, requires an airy, warm situation in the greenhouse, flowering readily about the month of July, or August; requiring to be kept in a small pot, the soil a light loam. It propagates by seeds, and slips.



Androsace cyanea.

Sup. to *Androsace* Dec. 2. 1890. by H. Andrews.
No. Houghtonbridge

PLATE XI.
GLADIOLUS ROSEUS.

Rose-coloured Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves.

COROLLA, sexpartita ringens. Petala oblonga, omnia unguibus in tubum conata.

STAMINA. Filamenta tria, subulata, divifuris alternis petalorum inferta. Antheræ oblongæ.

PISTILLUM. Germen inferum. Stylus simplex, longitudine flaminium. Stigma trifidum, concavum.

PERICARPIUM. Capsula oblonga, obtusa, trilocularis, trivalvis.

SEMINA plura, subrotunda.

EMPALEMENT Sheath two valves.

BLOSSOM, of six divisions, and gaping. Petals oblong, having their claws formed into a tube.

CHIVES. Three awl-shaped threads fixed into the alternate divisions of the petals. Tips oblong.

POINTAL. Seed-bud beneath. Shaft simple, the length of the chives. Summit cut into three, and concave.

SEED-VESSEL. Capsule oblong, blunt-ended, three cells, three valves.

SEEDS many, nearly round.

SPECIFIC CHARACTER.

Gladiolus, foliis lanceolatis, tortis, rubro marginatis, pubescentibus; floribus roseis odoratissimis.

Gladiolus, with spear-shaped leaves, twisted, red-edged, and downy; blossoms rose colour, and sweet-scented.

REFERENCE TO THE PLATE.

1. The two Valves of the Sheath.
2. A Flower cut open, to expose the insertion of the Threads, the Threads, and Tips remaining attached.
3. The Seed-bud, Shaft, and Summit magnified.
4. A Seed natural size, inclosed in its Tunic.

THIS most beautiful species of Gladiolus, is but of very recent date in England; in the year 1795 it was seen first to blow here, in the collection of J. Ord, Esq. Purser's-cross, Fulham; but has since, repeatedly, at the nursery, Hammersmith, from whence this figure was taken. Professor Jacquin has figured this plant, in his last Fasciculus; but, undoubtedly, from a dried specimen, as his figure gives no idea of the brilliancy of this delightful plant. The fragrance of its flowers, added to the singularity and beauty of its leaves, must place it in the foremost rank of its congeners. To preserve the bulb of this delicate Gladiolus, as soon as the stem begins to decay, it should be taken from the pot, and kept dry till October; when it should be replanted, and treated as other Cape bulbs. It increases by offsets, and flowers about the month of May, or June.



Lilium roseum.

Pub. in the Bot. Beechey, 1847, by J. A. Smith.
F. H. Knightbridge.

PLATE XII.
GERANIUM GRANDIFLORUM.
Largest flowered Crane's-bill.

CLASS XVI. ORDER II.
MONODELPHIA DECANDRIA. Threads united. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum: foliolis ovatis, acutis, concavis, persistentibus.

COROLLA. Petala quinque, obcordata, seu ovata, patentia, magna.

STAMINA. Filamenta decem, subulata, corolla breviora. Antheræ oblongæ, versatiles.

PISTILLUM. Germen quinquangulare, rostratum. Stylus subulatus, staminibus longior, persistens. Stigmata quinque, reflexa.

PERICARPIUM nullum. Fructus pentacoccus, rostratus.

SEMINA solitaria, reniformia, sæpe arillata; Arista longissima, demum spirali.

EMPALEMENT. Cup five leaves: leaves egg-shaped, sharp pointed, concave, and permanent.

BLOSSOM. Five petals, inversely heart-shaped, or egg shaped, spreading, and large.

CHIVES. Ten threads, awl-shaped and shorter than the blossom. Tips oblong, easily turned round.

POINTAL. Seed-bud five-angled, and beaked. Shaft awl-shaped, longer than the chives and remaining. Five reflexed summits.

SEED-VESSEL none. Fruit five dry berries, beaked.

SEEDS, solitary, kidney-shaped, often furnished with a dry husky coat, and a very long awn, which become spiral.

SPECIFIC CHARACTER.

Geranium, calycibus monophyllis, foliis quinque-lobis, glabris, dentatis; floribus amplissimis, sub-albidis.

Geranium, empalements of one leaf; leaves five-lobed, smooth, and toothed; the flowers very large, nearly white.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to shew its tubular structure.
2. The Chives, and Pointal, as placed in the flower, (natural size.)
3. The Shaft, Summits, and Seed-bud, (magnified.)

OF all the species of this numerous tribe, introduced to us, from the Cape of Good Hope, this stands singularly pre-eminent; whether for delicacy of foliage, or beauty of flower, of which, the most finished drawing would convey but a faint idea. The figure before us, was taken from a plant in the valuable collection of G. Hibbert, Esq. Clapham; from whom we understand, that it was sent in 1794 to the Royal Gardens at Kew, by Mr. F. Masson. To keep this plant in a flourishing condition, it should be kept in a window of the stove, in winter, as the heat of a greenhouse is scarce sufficient at that season. It flowers in July, or August, and requires the soil generally used for Geraniums, a mixture of rotten dung, and loam; being easily propagated by cuttings.

To dissent from most of the late publications on the science of Botany, may seem presuming; yet, when it shall be considered, that we take Linnæus for our sole guide, where that great master has incontestably fixed a Generic character, to a tribe of plants, which undoubtedly, came clearly under his inspection; from his dictates, ours must emanate, although his authority may be questioned by others. If any good reasons had been found, to disunite a Genus, which nature has so palpably distinguished throughout all its numerous species; he certainly, who had minutely examined so many, would not in his factitious System have allied them; though nature had apparently so done. We must therefore, after him, think no Generic division necessary. For the sake of correctness, where a Genus is so extended in its species as Geranium, Erica, &c. are; the conformity of particular parts, may form a secondary arrangement, as we find it constantly in Linnæus; the Heaths, from the shape of their tips, the Geraniums, from the number of fertile Chives; which a French Botanist of the name of L'Heritier, has thought of sufficient moment to create two new Genera on, Erodium and Pelargonium, retaining the old name Geranium for those only, with ten perfect Chives. Monf. L'Heritier and his followers must, therefore, forgive us for ranking one of his Pelargoniums under the old standard.



Geranium grandiflorum.

Publ. as the old variety, Feb. 7, 1877, by H. Andrews
N^o 3. Knightbridge.

PLATE XIII.
EPIDENDRUM COCHLEATUM.

Purple flowered Epidendrum.

CLASS XX. ORDER I.
GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

GENERIC CHARACTER.

CALYX. Spathæ vagæ. Spadix simplex. Perianthium nullum.

COROLLA. Petala quinque, oblonga, longissima, patentissima.

Nectarium basi tubulatum, turbinatum, intra petala deorsum positum, ore obliquo, bifido: superiori labio brevissimo, trifido; inferiori in acumen producto.

STAMINA. Filamenta duo, brevissima, pistillo infidentia. Antheræ testæ labio superiore nectarii.

PISTILLUM. Germen tenue, longum, contortum, inferum. Stylus brevissimus, adnatus labio superiori nectarii. Stigma obsoletum.

PERICARPIUM. Siliqua longissima, teres, carnosa.

SEMINA numerosa, minutissima.

EMPALEMENT. Sheaths scattered. Fruit-stalk simple. Cup none.

BLOSSOM. Five petals, oblong, of a great length, and spreading much.

Honey-cup tubular at the base, turban-shaped, placed between the lower petals, mouth oblique and divided: the upper lip very short, cut into three divisions; the lower terminating in a point.

CHIVES. Two very short threads, fixed on the pointal. Tips covered by the upper lip of the honey-cup.

POINTAL. Seed-bud slender, long, twisted, and beneath. Shaft very short, fixed to the upper lip of the honey-cup. Summit blunt.

SEED-VESSEL. Pod very long, round, and fleshy.

SEEDS numerous, extremely small.

SPECIFIC CHARACTER.

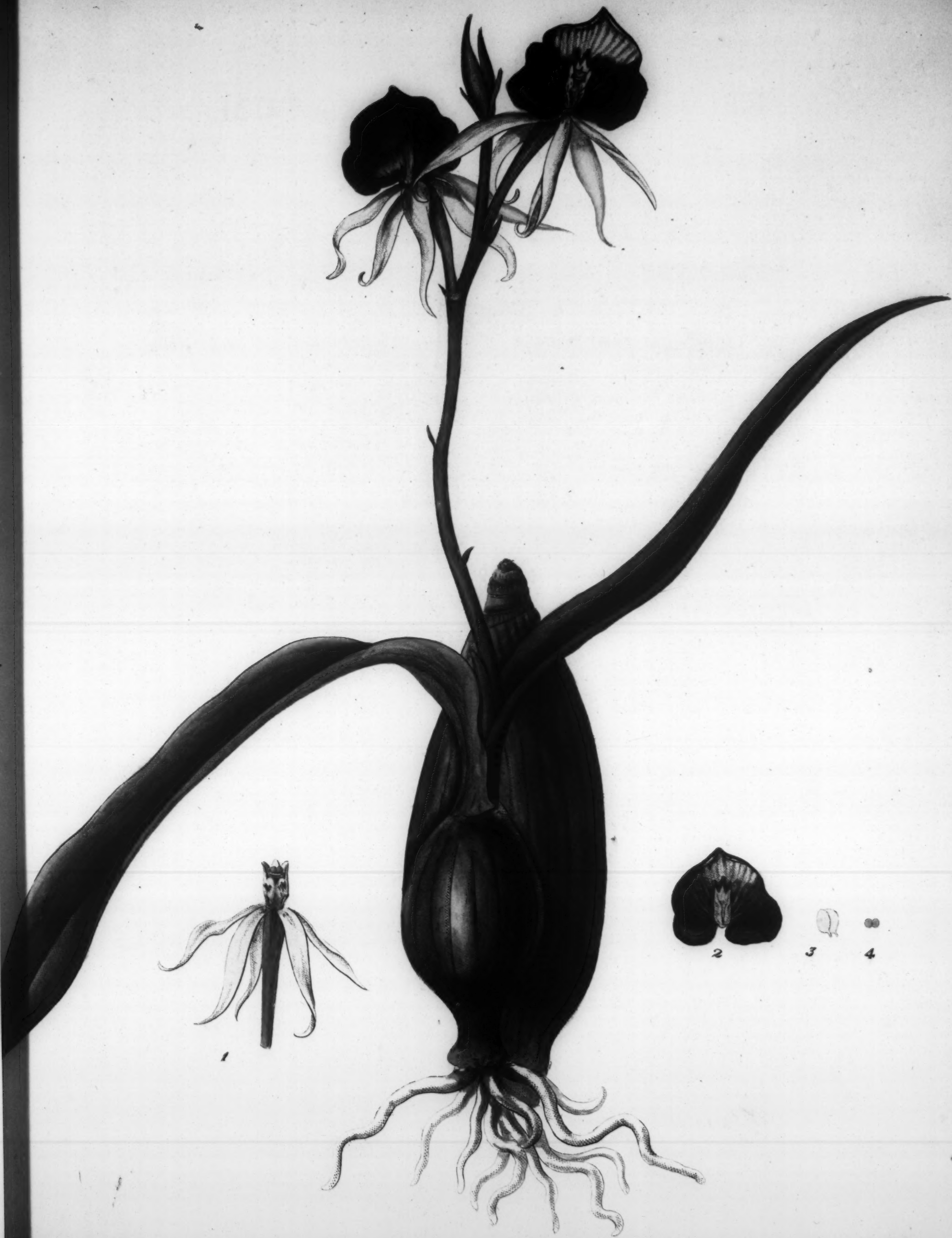
Epidendrum foliis oblongis, geminis, glabris, bulbo innatis; scapo multifloro; nectario cordato, purpureo.

Epidendrum with oblong leaves growing by pairs, smooth, rising from the bulb; stalk many flowered; honey-cup heart-shaped and purple.

REFERENCE TO THE PLATE.

1. The Blossom, without the Honey-cup; disposed to shew the situation of the Chives, and Pointal, which are covered by the Honey-cup.
2. The Honey-cup.
3. The Tips.
4. The Summits.

Of all plants, none furnish a more agreeable speculation to the Botanist, than those of this class; the singular construction of the whole flower, leads the observer to form analogous comparisons from it to animal life: particularly amongst the Orchis, and Ophris, of our own country; where bees, flies, lizards, and butterflies are accurately shaped in the honey-cup. The Genus Epidendrum, takes its Generic title from its place of growth, being what Botanists term parasitical, that is, growing on another plant; which is the case, with most of the species of this Genus: yet is cultivated here with success, by planting it in a mixture of rotten wood, and loam. A plant, from which this figure was taken, was a present to Messrs. Lee and Kennedy from the Honourable Mrs. Barrington, who received it from Dr. Dancer's botanical garden Jamaica, of which island it is a native; therefore must be kept in the stove. It is propagated by dividing the bulbs.



Didendrum cochleatum.

Ed. in the Bot. Garden, March 1844, by H. A. ...
N. Knightbridge.

PLATE XIV.
IXIA REFLEXA.

Reflex flowered Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves, oblongæ, persistentes, germina distinguentes.

COROLLA. Petala sex, oblonga, æqualia, lanceolata.

STAMINA. Filamenta tria, subulata, corolla breviora, situ æqualia. Antheræ simplices.

PISTILLUM. Germen inferum, ovatum, triquetrum. Stylus simplex, erectus, longitudine flaminum. Stigma trifidum, crassiusculum.

PERICARPIUM. Capsula subovata, triquetra, trilocularis, loculis compressis, trivalvis.

SEMINA subrotunda, plurima.

EMPALEMENT. Cup two valves, oblong, remaining, and dividing the seed-buds.

BLOSSOM. Six oblong petals of an equal length, and spear-shaped.

CHIVES. Three awl-shaped threads, shorter than the blossom, placed equally. Tips simple.

POINTAL. Seed-bud beneath egg shaped, and three-fided. Shaft simple, upright, the length of the chives. Summit cut into three, and thickish.

SEED-VESSEL. Capsule, nearly egg-shaped, three-fided, three cells, pressed together, three valves.

SEEDS many, nearly round.

SPECIFIC CHARACTER.

Ixia floribus spicatis, reflexis; foliis ensiformibus, glabris.

Ixia, with flowers growing in a spike, and bent backward; leaves sword-shaped, and smooth.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement (magnified).
2. The Blossom.
3. The Chives (magnified).
4. The Pointal (magnified).

No genus exhibits greater diversity, either in the figure, or colour of the blossoms, of its various species than *Ixia*; the extreme delicacy of their colours, rendering it absolutely necessary to protect them both from wind and rain; even watering them over their heads (as is usual with greenhouse plants), at once destroys their brilliancy. The bulbs of this species were gathered at the Cape, by J. Pringle, Esq. from whom they were sent to Messrs. Lee and Kennedy in 1795, at whose nursery they flowered the ensuing spring, when this figure was taken. No particular treatment is necessary for this plant, other than what is given to Cape bulbs in general, viz, an airy situation, and light soil. Is propagated by seeds, and by the roots.



via reflexa.

Sub. as the Bot. d. v. l. March. 1. 1922.
by H. Andrews N.B. Knightbridge

PLATE XV.
ANTHYLLIS ERINACEA.

Blue Broom of Spain.

CLASS XVII. ORDER III.
DIADELPHIA DECANDRIA. Chives in two sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, ovato-oblongum, parum inflatum, villosum; ore quinquedentato, inæquali; persistens.

COROLLA papilionacea:

Vexillum longius, lateribus reflexis, ungue longitudine calycis.

Alæ duæ, oblongæ, vexillo breviores.

Carina compressa, longitudine alarum, alis fimilis.

STAMINA. Filamenta decem, connata, affurgentia. Antheræ simplices.

PISTILLUM. Germen oblongum. Stylus simplex, ascendens. Stigma obtusum.

PERICARPIUM. Legumen subrotundum, tectum intra calycem, minimum, bivalve.

SEMEN unum, alterumve.

EMPALEMENT. Cup of one leaf, oblong egg-shaped, a little swelled, and hairy; mouth cut into five unequal teeth; permanent.

BLOSSOM, butterfly-shaped.

Standard longer, sides bent back, the claws as long as the cut.

Wings two, oblong, shorter than the standard.

Keel compressed, as long as the wings, and like them.

CHIVES. Ten threads, connected, rising upwards. Tips simple.

POINTAL. Seed-bud oblong. Shaft simple, ascending. Summit blunt.

SEED-VESSEL. Pod roundish, covered by the cup, very small, of two valves.

SEEDS. One or two.

SPECIFIC CHARACTER.

Anthyllis fruticosa, spinosa; foliis simplicibus; floribus ex cæruleo purpurascens.

Broom, shrubby, and covered with prickles; leaves simple; blossoms of a purplish blue.

REFERENCE TO THE PLATE.

1. The Cup.
2. A Blossom, the cup taken off to shew the exact situation and shape of its various parts.
3. The Chives, as they inclose the pointal (natural size.)
4. The Threads magnified, and cut open, to shew their tubular shape.
5. The Pointal, magnified.

OWING to the difficulty in propagating and preserving some plants, although frequently introduced to us, and well known; yet are they more scarce to be found, in our best collections, than plants of seemingly more difficult acquisition. This species of *Anthyllis* has been mentioned under various synonyms by most botanical authors from Clusius downwards. Mr. T. Johnson, in his edition of Gerard of 1633, has given a description of this plant from Clusius, and a cut; both of which are excellent (considering the then infant state of the art of engraving), under the title of *Genista spinosa humilis; Dwarf Furze*. It is termed *Erinacea* by Clusius (says he), from the Spanish name of the hedge-hog, *Erizo*, of which country it is a native, in the kingdom of Valencia: from which we might infer, that, like other plants of that country, it would live through our winters; which is not the case. It must be kept as a greenhouse plant, and watered but sparingly. The soil it prefers is a light loam; is propagated by cuttings, and flowers in April, or May.

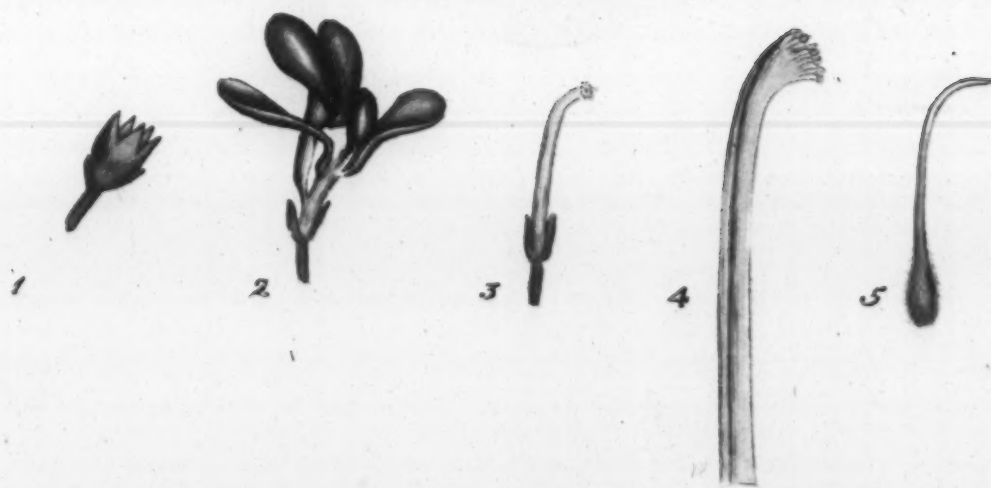
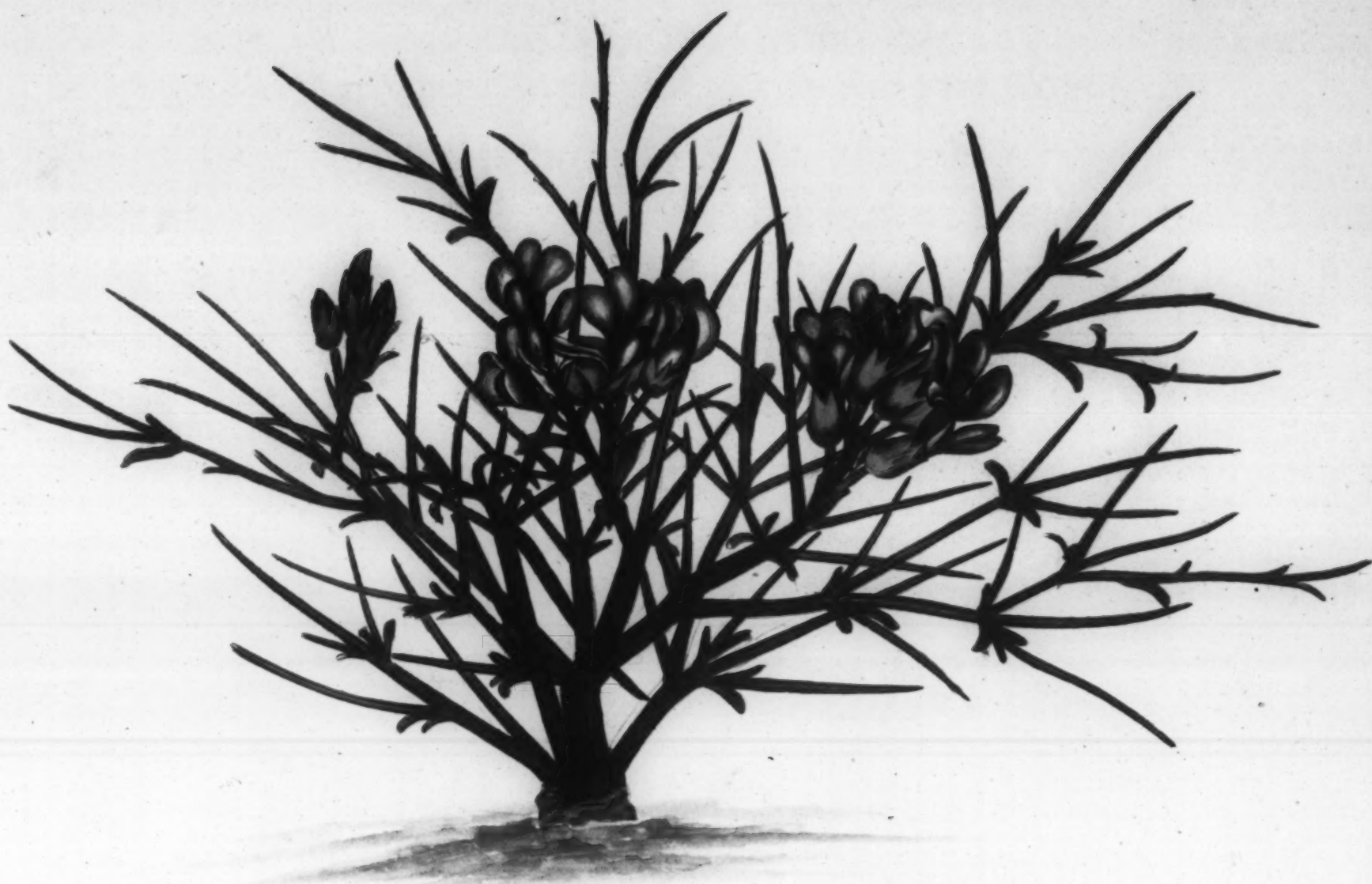


PLATE XVI.
AZALEA PONTICA.
Yellow Pontic Azalea.

CLASS V. ORDER I.
PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquepartitum, acutum, erectum, parvum, persistens.

COROLLA. Monopetala, campanulata, limbus quinquefidus: laciniarum lateribus inflexis.

STAMINA. Filamenta quinque, filiformia, receptaculo inserta, libera. Antheræ simplices.

PISTILLUM. Germen ovatum. Stylus filiformis, longitudine corolla, persistens. Stigma obtusum.

PERICARPIUM. Capsula ovata, quinquelocularis, quinquevalvis.

SEMINA plurima, compressa.

Obs. Figura petali in aliis infundibuliformis, in aliis campaniformis est; stamina in quibusdam declinata longissima.

EMPALEMENT. Cup one leaf with five divisions, sharp pointed, upright, small, and permanent.

BLOSSOM. One petal, bell-shaped, margin five-cleft: segments with the edges bent inwards.

CHIVES. Threads five, thread-shaped, fixed to the receptacle, and loose. Tips simple.

POINTAL. Seed-bud egg-shaped. Shaft thread-shaped, the length of the blossom, permanent. Summit blunt.

SEED-VESSEL. Capsule egg-shaped, with five cells, and five valves.

SEEDS many, and flat.

Obs. The shape of the petal in some is funnel-shaped, in others bell-shaped; the chives in some are bent downward, and very long.

SPECIFIC CHARACTER.

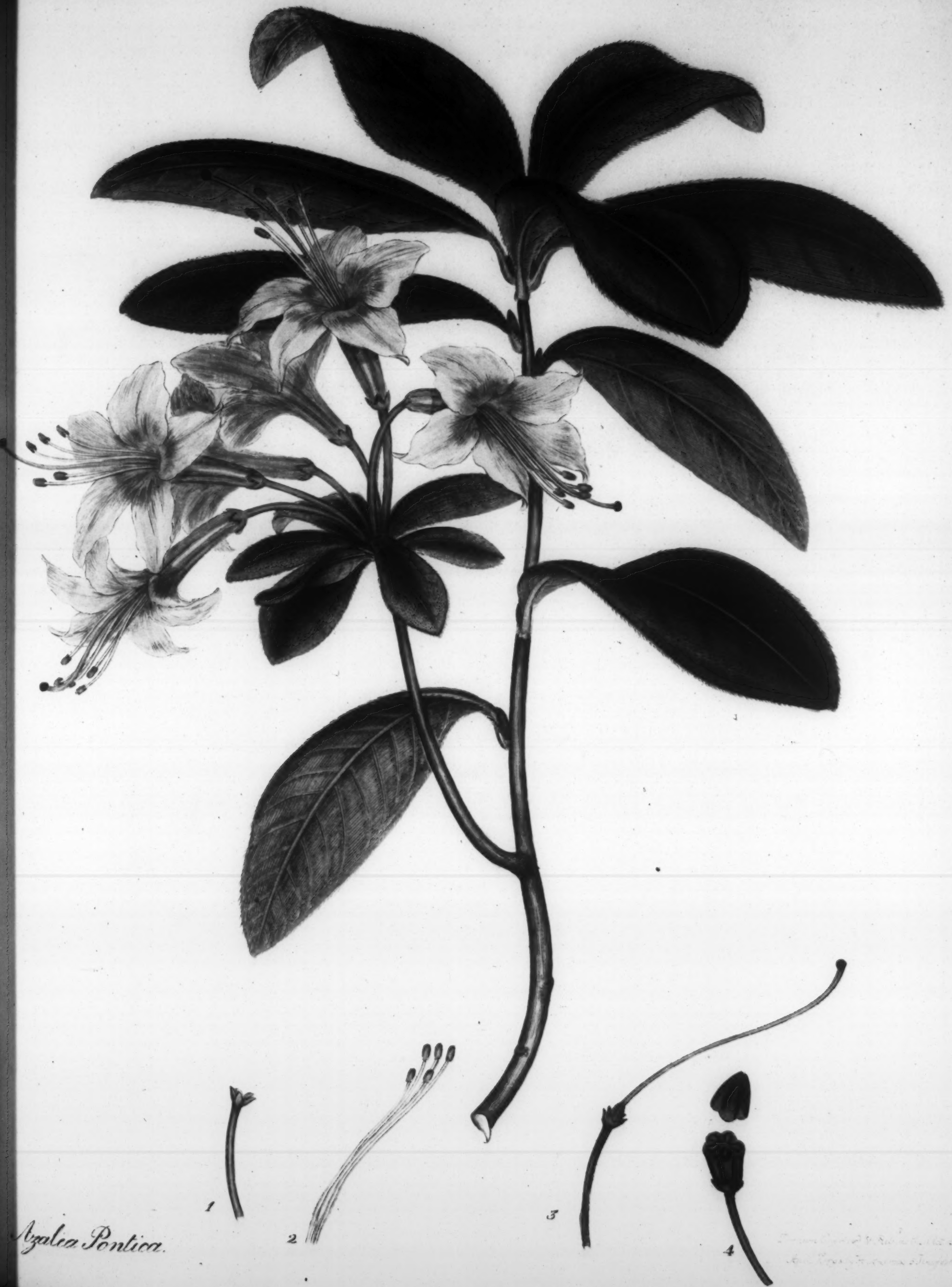
Azalea, foliis ovato-oblongis, pilosis, alternis; floribus amplissimis, luteis; staminibus longissimis, declinatis.

Azalea, with oblong egg-shaped leaves, hairy, and alternate; flowers very large, and yellow; chives very long, and bent downward.

REFERENCE TO THE PLATE.

1. The Empalement, (natural size.)
2. The Chives as they appear within the blossom.
3. The Seed-bud, Shaft, and Summit.
4. A Capsule cut horizontally, exposing the number of its cells.

AMERICA has furnished our gardens with an extensive variety of beautiful shrubs; amongst them, the Azaleas hold a distinguished place; some for the beauty, others for the fragrance, of their blossoms: the present species far surpasses all of them for both. It is a native of the coast of the Black Sea, or Pontus Euxinus, through the whole of its extent, on the Asiatic side, from the city of Trebisonde; from whence its trivial name. That a plant of such extreme beauty, and sweetness, should so long have been a stranger to our European gardens, though known to, and described by, so many botanical travellers, must seem matter of wonder; but still it is an uncontested fact. Monf. Tournefort, in his Voyage to the Levant, has given an ample description of it, under the title of *Chamærhododendros Pontica maxima*, mespili folio, flore luteo; where he says, it grows to the height of seven or eight feet, and that the flowers are of a most exquisite flavour. Dr. P. Pallas, in his *Flora Rossica*, has likewise figured, and described it, under the name it here bears; but apparently his drawing was made from a dried specimen, as the brilliancy of the flower is by no means preserved; but it is to him we are indebted for this fine plant. In his voyage to the Crimea and countries adjacent, in 1792, he procured the seeds of this, amongst many other valuable and rare plants; parcels of most of which were sent by him to Messrs. Lee and Kennedy, Hammer-smith; by whom plants were raised of it, and many other sorts, the next year. It is a deciduous shrub, extremely hardy, and blows early in the spring; is propagated, like other Azaleas, by layers and seeds; grows best in peat earth, with a small portion of loam.



Azalea Pontica.

From the collection of the British Museum, London.

PLATE XVII.
PROTEA FORMOSA.

Coronet Protea.

CLASS IV. ORDER I.
TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium commune, imbricatum; squamis inæqualibus, persistentibus.
Proprium nullum.

COROLLA tetrapetala. Petala sæpe cohærentia, sæpius divisa, lineari-oblonga: unguibus erectis, limbo patenti.

STAMINA. Filamenta nulla. Antheræ quatuor, lineares, vel oblongæ, sub apice limbi corollæ insertæ.

PISTILLUM. Germen superum, oblongum. Stylus filiformis, corolla longior. Stigma simplex, clavatum.

PERICARPIUM nullum. Calyx patens, induratus, vix mutatus.

SEMINA solitaria, subrotunda, vel compressa.

RECEPTACULUM commune nudum, villosum, paleaceum, vel conus.

EMPALEMENT. Cup common, scaled; scales unequal, and remaining.

Proper none.

BLOSSOM four-leaved. Petals frequently adhering, oftener divided, of a linear oblong shape: claws upright, border spreading.

CHIVES. Threads none. Tips four, linear, or oblong, fixed within the border of the blossom.

POINTAL. Seed-bud above, and oblong. Shaft thread-shaped, longer than the blossom. Summit simple, and club-shaped.

SEED-VESSEL none. Cup spreading, hard, and scarcely changing.

SEEDS solitary, nearly round, or flat.

RECEPTACLE the common, is naked, hairy, chaffy, or a cone.

SPECIFIC CHARACTER.

Protea, foliis lanceolatis, pubescentibus; caule villoso; flore aurantio flavo; semine subrotundo, glabro, magnitudine pisi majoris.

Protea, with lance-shape downy leaves; stem hairy; blossom orange yellow; seed nearly round, smooth, the size of a large pea.

REFERENCE TO THE PLATE.

1. The Flower complete, as it stands on the Receptacle.
2. The Blossom expanded, to shew the situation of the Chives.

OF all the varied genera of plants which decorate that mine of botanical riches, the Cape of Good Hope, and the adjacent country, no one stands more conspicuous than *Protea*. Few travellers who have not noticed the singularity and beauty of their foliage; indeed they are of such extreme brilliancy, that no one, however indifferent to botanical researches, can pass them unobserved; forests of them being so numerous, the *Protea Argentea*, or Silver Tree, produces almost the only wood of the country; growing to the height of thirty or forty feet. But although the leaves of this numerous tribe are mostly beautiful, many of their blossoms are but trifling, except in the eye of the botanist: the *Protea Formosa*, however, is one amongst many which stand as powerful exceptions: the great beauty of this charming plant has induced us to adopt the trivial name it here bears. It has been introduced to the Royal Gardens at Kew by Mr. F. Maffon, botanical collector to his present Majesty; from whose liberal patronage the science of Botany has of late been brought into such general estimation. This species, from the downy character of the whole plant, is apt to damp, if not kept in an airy situation in winter; though the warmth of a common greenhouse is quite sufficient for its protection. It is with difficulty propagated by cuttings; and has not hitherto perfected its seeds in this kingdom. Our drawing was made from a plant which flowered in the nursery of Messrs. Lee and Kennedy, in the year 1796, about the month of August.



PLATE XVIII.
CORREA ALBA.

White Correa.

CLASS VIII. ORDER I.
OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quadridentatum, campanulatum, erectum, persistens.
COROLLA. Petala quatuor, oblonga, concava, apice reflexa, marginibus crassis.
STAMINA. Filamenta octo, erecta, filiformia, receptaculo inserta.
PISTILLUM. Germen turbinatum, superum. Stylus filiformis, longitudine staminum. Stigma obtusum.
PERICARPIMUM. Capsula coriacea, lanata, quadrilocularis, quadrivalvis.
SEMINA quatuor, solitaria, subrotunda.

EMPALEMENT. Cup of one leaf, five-toothed, bell-shaped, upright, and permanent.
BLOSSOM. Four petals, oblong, concave, reflexed at the end, and thick at the edges.
CHIVES. Eight threads, upright, thread-shaped, and fixed into the receptacle.
POINTAL. Seed-bud turban-shaped, and above. Shaft thread-shaped, the length of the chives. Summit blunt.
SEED-VESSEL. Capsule leathery, and woolly, four cells, four valves.
SEEDS four, solitary, and nearly round.

SPECIFIC CHARACTER.

Correa, foliis subrotundis, supra tomentosis, subtus lanigeris; floribus terminalibus, quaternis, albidis.

Correa, with leaves nearly round, downy on the upper surface, woolly on the under surface; flowers terminate the branches by fours, and are white.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Chives, and Pointal.
3. A Thread, and Tip, (magnified.)
4. The Shaft and Summit, (magnified.)

THE *Correa* is a native of Port Jackson, in New Holland, and commonly termed a Botany-bay plant: it was first raised in the year 1793, from seeds which were given by Sir Joseph Banks, Bart. to J. Vere, Esq. of Kenfington-gore, and from a plant in whose collection our figure was taken. It receives its generic title from Mr. Joseph Correa de Serra, a native of Portugal; a gentleman of very distinguished talents as a man of science in general, and botany in particular. Of this genus there are as yet but few species discovered; the *Alba* grows to a shrub of the height of four or five feet, woody and tough; both stem and leaves are covered with a thick flannelly substance, particularly the under side of the leaves, which gives the whole plant a whitish appearance. It continues to flower through the months of April, May, and June; may be propagated easily by cuttings, should be kept as a hardy greenhouse plant, and thrives best in peat earth.



Cornua alba.

*From the garden of the University of Cambridge, April 1778.
By the Rev. J. B. Smith.*

PLATE XIX.
GLADIOLUS VERSICOLOR.

Changeable Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves.

COROLLA, sexpartita, ringens. Petala oblonga, omnia unguibus in tubum connata.

STAMINA. Filamenta tria, subulata, divisuris alternis petalorum inserta. Antheræ oblongæ.

PISTILLUM: Germen inferum. Stylus simplex, longitudine staminum. Stigma trifidum concavum.

PERICARPIUM. Capsula oblonga, obtusa, trilocularis, trivalvis.

SEMINA plura, subrotunda.

EMPALEMENT. Sheath two valves.

BLOSSOM, of six divisions, and gaping. Petals oblong, having their claws formed into a tube.

CHIVES. Three awl-shaped threads, fixed into the alternate divisions of the petals. Tips oblong.

POINTAL. Seed-bud beneath. Shaft simple, the length of the chives. Summit cut into three, and concave.

SEED-VESSEL. Capsule oblong, blunt-ended, three cells, three valves.

SEEDS many, nearly round.

SPECIFIC CHARACTER.

Gladiolus, foliis lineari-cruciatis; floribus maximis, varicoloribus.

Gladiolus, with linear cross-shaped leaves; flowers very large, and changeable.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement.
2. The Pointal, and Seed-bud; one of the divisions of the Summit magnified.
3. A ripe Seed, natural size, in its tunic.

THAT colour bears the character given it by Sir Isaac Newton, our present subject (as did the prism) adds another proof. The Gladiolus varicolor might, like the camellion, equally be a subject of contention, to those who have seen its blossom at different periods of the same day; for, strange to tell! it is brown in the morning, and continues to change from that colour till it becomes light blue by night. During the night it regains its pristine colour; and this change is effected diurnally, whilst the flower is in its vigour; but upon the decay, the change is less powerful, gradually fixing in a dark brown; which, however, does not take place in less than nine or ten days. This is the only flower, we have ever noticed, to regain the colour that has once forsook it. A drawing was begun about ten o'clock in the morning, but before it was finished the plant was so totally altered in colour that there was an absolute necessity for taking a second day to complete it. The bulbs of this plant were sent from the Cape of Good Hope by J. Pringle, Esq. of Madeira, in 1794, amongst many others, to Messrs. Lee and Kennedy, of Hammer-smith, where the drawing was made. It flowers about the month of June; is increased by the root or seed; and thrives best in peat earth.



Stadiolus versicolor.

PLATE XX.

ECHIUM GRANDIFLORUM.

Large-flowered Viper's Buglofs.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quinquepartitum, erectum persistens; laciniis subulatis erectis.

COROLLA. Monopetala, campanulata. Tubus brevissimus. Limbus erectus, sensim ampliatum, quinquefidus obtusus; laciniis sæpius inæqualibus; superioribus duabus longioribus, infimis minoribus, acutis, reflexis. Faux pervia.

STAMINA. Filamenta quinque, subulata, longitudine corollæ, declinata, inæqualia. Antheræ oblongæ, incumbentes.

PISTILLUM. Germina quatuor. Stylus filiformis, longitudine staminum. Stigma obtusum, bifidum.

PERICARPIUM nullum. Calyx rigidior, in sinu femina fovens.

SEMINA quatuor, subrotunda, oblique acumenata.

EMPALEMENT. Cup with five divisions, upright, permanent; segments awl-shaped, upright.

BLOSSOM. One petal, bell-shaped. Tube very short. Border gradually widening, with five clefts, blunt. Segments oftenest unequal, the two upper ones the longest; the lower ones smaller, sharp, and reflexed. The mouth open.

CHIVES. Five threads, awl-shaped, the length of the blossom, declined, and unequal. Tips oblong, fixed sideways to the threads.

POINTAL. Seed-buds four. Shaft thread-shaped, the length of the chives. Summit blunt, and two-cleft.

SEED-VESSEL none. The cup growing more harsh, contains the seeds.

SEEDS four, roundish, obliquely tapering.

SPECIFIC CHARACTER.

Echium, foliis nitidis, lanceolatis, hispidis; caule fruticoso; corollis maximis, æqualibus, rubris.

Viper's Buglofs, with shining, lance-shaped, hairy leaves; stem shrubby; blossoms very large, equal, and red.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, to expose the situation of the Chives.
3. The Shaft and its Summit magnified.
4. A ripe seed.

THE *Echium Grandiflorum* is a native of the Cape of Good Hope, was sent from thence by Mr. F. Masson to the Royal Gardens at Kew, about the year 1791. The superior beauty of this species to the rest of its congeners makes it considered as a valuable greenhouse plant, although its intrinsic merit is sufficient to ensure it that character; the rich green of its foliage, contrasted to the colour of the blossoms, gives to each a singular brilliancy. It is rather a tender greenhouse plant, grows about two feet high, and becomes naked at the lower part of the stem; is with difficulty propagated by cuttings, seldom perfecting its seeds; thrives best in rich earth, and flowers in April and May. The drawing was made from a plant in the collection of the Marquis of Blandford, Bill-hill, Berks.



um grandiflorum.

*From the collection of the Earl of Arundel
at the Longleaze*

PLATE XXI.
VEREIA CRENATA.

Scolloped-leaf Vereia.

CLASS VIII. ORDER IV.
OCTANDRIA TETRAGYNIA. Eight Chives. Four Pointals.

GENERIC CHARACTER.

CALYX. Perianthium tetraphyllum, foliolis lanceolatis, concavis, erectis, acutis, persistens.

COROLLA monopetala, ventricosa; limbus patens, revolutus quadripartitus; laciniis ovatis, acuminatis.

Nectararia quatuor; singulum squamula debilia, minima, singulo germini ad basin extrorsum inserta.

STAMINA. Filamenta octo, brevia, quorum quatuor medio, quatuor vero ad basin corollae adnatæ. Antheræ subrotundæ simplices.

PISTILLUM. Germina quatuor, oblonga, deficientia in stylos subulatos. Stigmata obtusa.

PERICARPIUM. Capsulæ quatuor, ovatae acuminatae, rectæ, trigonæ, longitudinaliter futura introrsum dehiscentes.

SEMINA plurima minima.

EMPALEMENT. Cup four leaved, which are lance-shaped, concave, upright, sharp-pointed, and permanent.

BLOSSOM of one leaf, big bellied; border spreading, rolled back, and divided into four egg-shaped, pointed segments.

Honey-cups four, each consisting of a small slight scale, fixed on the outside the base of each feed-bud.

CHIVES. Eight short threads, four of which are fixed to the middle, and four to the base of the blossom. Tips nearly round, and simple.

POINTAL. Four feed-buds, oblong, ending in awl-shaped shafts. Summits blunt.

SEED-VESSEL. Four capsules, egg-shaped, tapering, upright and three sided, opening inwards along the seam.

SEEDS many, very small.

SPECIFIC CHARACTER.

Vereia, foliis oppositis, crenatis, patentibus; racemis longissimis laxis; floribus luteis.

Vereia, with opposite, scolloped, spreading leaves; very long loose spikes, and yellow flowers.

REFERENCE TO THE PLATE.

1. The Empalement, (natural size.)
2. A Blossom cut open to shew the situation of the Chives.
3. The Seed-vessel, Shafts, and Summits, with the scales of the Honey-cups, as they stand in the blossom, (magnified.)
4. One Capsule of the Seed-vessel detached.

THIS genus of Plants must class with Linnæus's natural order of Succulents, nearly approaching *Craffula* in habit; but as the Sexual System is the basis of our theory, we cannot admit it under that or any other yet described genus; we have therefore named it after James Vere, Esq. long and well known for his extended and liberal patronage to the professors and cultivators of the science; in whose beautiful and select collection at Kensington Gore, the present species, has for the first time, flowered in this kingdom. Mr. Anderson the gardener informs us, that this plant is a native of Sierra Leone; from whence it was sent to England, by Professor Eld. Elzelius, in the year 1793; that he has treated it as a tender hot-house plant, keeping it constantly in the tan bed, by which means he has made it flower; but from every appearance of the plant, we should be led to think the common treatment of hot-house Succulents would answer for this. It is easily propagated by cuttings; grows to the height of three or four feet, having when in flower the appearance of a middle sized shrub; blows in the winter months, and thrives best in rich mould.



PLATE XXII.
GOODENIA CALENDULACEA.
Cape Marygold-leaved Goodenia.

CLASS V. ORDER I.
PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quadrifidum, superum, persistens.

COROLLA monopetala, supra longitudinaliter fissâ, genitalia exserens; limbo quinquefido, secundo.

STAMINA. Filamenta quinque, receptaculo inserta. Antheræ lineares.

PISTILLUM. Germen inferum. Stylus simplex. Stigma urceolatum, ciliatum.

PERICARPIUM. Capsula oblonga, bilocularis, bivalvis; dissepimento parallelo.

SEMINA plura, scabrida.

EMPALEMENT. Cup four-cleft, above, and remaining.

BLOSSOM of one leaf, cleft longitudinally on the upper side, exposing the organs of fructification; border five-cleft, leaning one way.

CHIVES. Five threads fixed into the receptacle. Tips linear.

POINTAL. Seed-bud beneath. Shaft simple. Summit pitcher-shaped, and fringed.

SEED-VESSEL. Capsule oblong, with two cells, and two valves; partition parallel to the valves.

SEEDS many and rough.

SPECIFIC CHARACTER.

Goodenia, foliis obovatis, crassis, scabridis; floribus axillaribus, cæruleis.

Goodenia with inversely egg-shaped, thick rough leaves; flowers fitting close to the stem, and blue.

REFERENCE TO THE PLATE.

1. A Flower with all its parts complete.
2. A Blossom without the organs of fructification.
3. The Chives, Pointal, and Seed-bud (magnified).

THE *Goodenias* are all natives of New Holland, and received their generic name of Dr. J. E. Smith, President of the Linnæan Society; in honour of the Rev. Dr. Goodenough, whose valuable dissertation on the British species of *Carex*, does him the highest honour, as a botanist. The species of this genus (as yet discovered) are ten, from which we may infer that they are numerous; those only yet introduced to Britain are, the *lævigata*, *ovata*, and the present species; the others are described by the President, in the second volume of the Linnæan Transactions. This plant, though not to be ranked amongst the handsomest productions of that country, so replete with novelty, is yet possessed of sufficient merit to give it a place in our collections of greenhouse plants, flowering about the month of August; delighting most in an airy situation, and light soil. It is easily propagated by cuttings. Our figure was taken from a plant which flowered at the Hammersmith nursery, in 1797; where it had been raised from seeds, communicated by Colonel Paterson, then commanding at Port Jackson; to whose assiduous labours in collecting seeds, &c. the cabinets and collections of our natural historians are so very much indebted.



1

2

3

PLATE XXIII.

IXIA CAPITATA. *Var. ovata.*

Bunch-flowering Ixia. Var. Egg-shaped purple Petals.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6 petala, patens, æqualis. Stigmata 3, erectiusculo-patula.		BLOSSOM six petals, spreading equal. Summits three, nearly upright, spreading. See <i>Ixia reflexa</i> , Plate XIV.
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SPECIFIC CHARACTER.

<i>Ixia</i> , foliis radicalibus, ensiformibus; floribus capitatis, confertis, purpureis, petalis basi obscuris.		<i>Ixia</i> with leaves growing from the root, and sword-shaped; blossoms in close bunches, purple, and dark at the base.
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REFERENCE TO THE PLATE.

1. The two sheaths of the Empalement.
2. A flower cut open, to shew the insertion of Chives.
3. The Chives as attached to the tubular part of the blossom, the border cut off (magnified).
4. The Shaft, Summits, and Seed-bud (magnified).

THIS fine species of *Ixia*, a native of the Cape of Good Hope, was introduced to our collections about the year 1795, by Messrs. Lee and Kennedy, nurserymen; they having raised it from seeds received by them, from the Royal Gardens at Vienna; is certainly amongst the tenderest of its tribe: the root, being extremely subject to injury by wet, it should be dried as soon as it has done flowering. It is one of the earliest *Ixias* in bloom, being in high perfection about the middle of April; is increased but slowly by the root, thriving best in very sandy peat, or sand only. The figure here given was drawn from a plant which flowered at the nursery, HammerSmith; in 1798, for the first time.



capitata.
var ovata.

Det. as the *Hot direct* June 1, 1798 by H. Andrews.
N^o - Knightbridge

PLATE XXIV.
CINERARIA AURITA.
Two-coloured-leaved Cineraria.

CLASS XIX. ORDER II.
SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX. Communis, simplex; polyphyllus; foliolis æqualibus.

COROLLA. Composita, radiata. Corollulæ hermaphroditæ, æquales; numerosæ, in disco. Femineæ ligulatæ, numero foliorum calycis in radio.

Propria hermaphroditi, infundibuliformis; limbo quinquefido, erecto.

Femineæ ligulata, lanceolata, apice denticulata.

STAMINA. Filamenta quinque, filiformia breviora. Antheræ cylindræ, tubulosæ, apice quinquefida.

PISTILLUM, hermaphroditis. Germen oblongum. Stylus filiformis, longitudine staminum. Stigmata duo erectiuscula.

Femineis: Germen oblongum. Stylus filiformis, brevis. Stigmata duo, oblonga, obtusiuscula, revoluta.

PERICARPIUM nullum. Calyx immutatus.

SEMINA hermaphroditis solitaria, linearia, quadrangula. Pappus pilosus, copiosus.

RECEPTACULUM nudum, planiusculum.

EMPALEMENT. Common, simple; of many leaves; small leaves equal.

BLOSSOM. Compound, radiate. Florets with chives and pointals equal; numerous in the centre. Florets with only pointals ligulate; equal in number to the leaves in the circumference of the empalement.

Individuals with chives and pointals funnel-shaped; border five-cleft, upright.

Individuals with pointals only, ligulate, lance-shaped, toothed at the point.

CHIVES. Five threads, thread-shaped and short. Tips forming a hollow cylinder, with five clefts at the top.

POINTAL of florets with chives and pointals. Seed-bud oblong. Shaft thread-shaped, the length of the chives. Summits two, a little upright.

Of florets with pointals only. Seed-bud oblong. Shaft thread-shaped, and short. Summits two, oblong, rather blunt, and rolled back.

SEED-VESSEL none. Cup not changing.

SEEDS of florets with chives and pointals, solitary, linear and four-sided. Feather, hairy, abundant.

RECEPTACLE naked, rather flat.

SPECIFIC CHARACTER.

Cineraria, foliis cordatis, dentatis, pilosis, subtus purpurascens; petiolis auritis: floribus purpureis.

Cineraria with heart-shaped, indented, hairy leaves, purple underneath; the footstalks having lobes: the flowers purple.

REFERENCE TO THE PLATE.

1. The Empalement (natural size).
2. A floret of the ray (magnified).
3. A floret of the disk (magnified).
4. The Chives, Pointal, and Seed-bud of a floret of the disk (magnified).

IN the Sert. Anglic. of Mons. L'Heritier, this species of Cineraria has been described and figured under the specific character of Cruenta, from the botanic garden at Kew; where, according to the catalogue, it was first introduced by Mr. F. Masson, from the Canary Islands, about 1777; and by which specific it has hitherto been titled: but from what appearance or part of the plant, he could denominate it bloody, will not be easy to determine; from our idea of colour, he might as well have named it blue. Finding, therefore, a specific character certainly more fixed in the leaf, we have taken the liberty of altering Cruenta to Aurita; though that would not have been done, (as nothing is more contrary to our sentiments, than altering any published name) if there had been any glimpse of affinity to the plant in that title. This is unquestionably the handsomest species of Cineraria yet known, growing to the height of near three feet if encouraged. The specimen from which this figure was taken, and which was sent last March to the author, by Mr. James Colville, King's road, Chelsea, had attained that size. By night it is extremely fragrant, continuing its blossoms from the month of February, till August; seeding abundantly, by which it may be propagated, producing many varieties; or by the suckers which are thrown up from the roots; thriving best in light mould or peat.



Mercuria aurita.

Drawn for Purposes as the title directs June 6, 1890.
by John Andrew N. Knightbridge.

PLATE XXV.

CAMELLIA JAPONICA. *Var. Flore albo pleno.*

Double white Camellia.

CLASS XVI. ORDER V.

MONODELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX imbricatus, polyphyllus: foliolis interioribus majoribus.

|| EMPALEMENT tiled, of many leaves: the inner leaves the largest.

SPECIFIC CHARACTER OF VAR.

Camellia floribus amplissimis, plenis albidis.

|| Camellia with large double white flowers.

THOUGH it may be considered by some, as deviating from the botanical rule we prescribed to ourselves, at the outset of this work, not to figure any flower, but what could be systematically ascertained; double flowers, &c. having lost those constituent characters necessary to the Sexual System; yet having seen this most delightful plant in bloom last year, the temptation was too powerful to be resisted, for giving a figure of it in the Botanist's Repository. This fine variety of the Camellia, was first imported from China about the year 1793, by Captain Connor of the Carnatic East-indiaman, for the gardens of the late I. Slater, Esq. a gentleman of most indefatigable spirit, for the introduction of new plants to this kingdom; indeed, it is to him we owe most of the plants received from China within these few years; he having procured a catalogue to be printed of all the described Chinese plants in that language, with the descriptions translated, and by various hands transmitted it to that country. The finest plants in this kingdom, of the double white Camellia, are now in the collection of Sir Joseph Banks, Bart. P. R. S. This, like the others of this genus, we may consider of sufficient hardness to resist our winters; being a native of the Japanese isles, where, as well as in China, it was seen by Thunberg. As yet (from its scarcity) that cannot be ascertained; but from the easy method by which it is propagated by cuttings, we are in hopes it soon may. It is at present cultivated as a hot-house plant, where certainly it will be always seen in the greatest perfection; the flowers being of so delicate and brilliant a white, their beauty is easily destroyed, even by watering. Flowers in the autumnal months, and thrives best in rich loam.



PLATE XXVI.

CRASSULA ODORATISSIMA.

Sweet-scented Crassula.

CLASS V. ORDER V.

PENTANDRIA PENTAGYNIA. Five Chives. Five Pointals.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum; foliolis lanceolatis, canaliculato-concavis, erectis, acutis, conniventibus in tubum, persistentibus.

COROLLA. Petala quinque, unguibus longis, linearibus, rectis, conniventibus, reflexo-patentibus.

Nectaria quinque; singulum squamula minima, emarginata basi germinis extrorsum annexa.

STAMINA. Filamenta quinque, subulata, longitudine tubi, unguibus corollae inserta. Antherae simplices.

PISTILLUM. Germina quinque, oblonga, acuminata, definita in stylos subulatos, longitudine staminum. Stigmata obtusa.

PERICARPIUM. Capsulae quinque, oblongae, acuminatae, rectae, compressae, longitudinaliter introrsum dehiscentes.

SEMINA plura, parva.

EMPALEMENT. Cup of five leaves; the small leaves are lance-shaped, concave and channelled, upright, sharp, formed into a tube, and remaining.

BLOSSOM. Petals five, claws long, linear, upright, joined together, bent back, and spreading.

Honey-cups five, each consisting of a small scale notched at the end, and fixed on the outside the base of each seed-bud.

CHIVES. Five threads, awl-shaped, the length of the tube, fixed into the claws of the blossom. Tips simple.

POINTAL. Seed-buds five, oblong, pointed, ending in awl-shaped shafts, the length of the chives. Summits blunt.

SEED-VESSEL. Five capsules, oblong, pointed, upright, pressed together, and opening inwards along the seam.

SEEDS, many, small.

SPECIFIC CHARACTER.

Crassula foliis oppositis, amplexicaulibus, ciliatis, linearibus; floribus capitatis, odoratissimis, luteis.

Crassula with opposite leaves that embrace the stem, fringed and linear; the flowers grow in bunches, are sweet-scented and yellow.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open to shew the insertion of the threads.
3. One Petal of the blossom.
4. The five Pointals as they stand in the blossom, with their honey-cups attached to the bottom of the Seed-buds.
5. One Pointal (magnified).

THE *Crassula Odoratissima* is a native of the Cape of Good Hope, was introduced to our gardens about the year 1794, but did not flower till 1796. The scent of this plant at night is so very powerful, that by many it may be deemed almost offensive, though by others it is considered as most agreeable; the flavour is nearly affined to the tuberose. This is not a very showy plant, growing about a foot high, and flowers from March, till May or June. It is most easily propagated by cuttings, lives in the common greenhouse with very little care, and in almost any sort of earth. This figure was taken at Messrs. Lee and Kennedy's, nurserymen, Hammersmith, where the plant was first raised.



Eragrostis odoratissima.

Pro. in herb. bot. Juss. et G. R. R. R.
Engelm.

PLATE XXVII.

GLADIOLUS RINGENS. *Var. cinereo odorato.*

Gaping Ash-coloured sweet Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, ringens.
STAMINA adscendentia.

BLOSSOM six divisions, gaping.
CHIVES ascending.
See Plate XI.

SPECIFIC CHARACTER.

Gladiolus foliis linearibus, costatis; floribus
ringentibus, cineris, odoratissimis.

Gladiolus with linear, ribbed leaves; the blossoms gaping, ash-coloured, and very sweet-scented.

REFERENCE TO THE PLATE.

1. The two sheaths of the Empalement.
2. A Blossom cut open to expose the insertion of the Chives.
3. The Pointal (one Summit magnified).
4. A Seed in its coat.

THIS most desirable Gladiolus, is not a perfect novelty in the greenhouse; although extremely scarce, it has been introduced to us constantly from the Cape of Good Hope, but from its great delicacy has been repeatedly lost. The plants now in England, have been imported from Holland, from the collection of Messrs. Voorhelm and Co. who about the year 1793, purchased the largest collection ever formed at the Cape, from a Frenchman who had been many years resident there. The Gladiolus ringens about mid-day has the flavour of violets so powerfully, that a single plant is sufficient to scent a whole greenhouse. It is with difficulty preserved from rotting at the root; therefore should be grown in very sandy peat, and should be exposed to dry as soon as the flower is gone. Is propagated by the root, or by seed, which may be procured by great care not to over-water the bulb after flowering; but herein there is great danger.



Gladiolus ringens.
Var. *cinereus odoratus.*

Painted by J. G. Smith, 1840.
Engraved by J. G. Smith, 1840.

PLATE XXVIII.

GERANIUM ELEGANS.

Round-leaved Geranium.

CLASS XVI. ORDER II.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata 5. Fructus rostratus,
5-coccus.

One POINTAL. Five Summits. Fruit furnished
with long awns, 5 dry berries.
See GERANIUM GRANDIFLORUM, Plate XII.

SPECIFIC CHARACTER.

Geranium pedunculis multifloris; calycibus monophyllis, foliis orbiculatis, serratis rigidis, petiolis longissimis; caule herbaceo.

Geranium, the fruit-stalks supporting many flowers; cups of one leaf; the leaves round, sawed, and harsh, with very long foot-stalks; stem herbaceous.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to shew its tubular shape to its base.
2. The Chives, and Pointal, natural size.
3. The Pointal, magnified.

THIS truly elegant species of Geranium was introduced to us from the Cape of Good Hope, in the year 1795; being raised from seeds, received from thence, by Messrs. Lee and Kennedy, in whose collection it flowered for the first time this year, about the latter end of May, and from which specimen this figure was taken. It is one of those that have in general seven fertile tips, and, therefore, must be placed under Mr. L'Heritier's genus Pelargonium, by those who follow his new arrangement. It is a hardy plant, and requires only a common greenhouse for its protection, where it will seed; which seems to be the readiest mode of propagating it, as it produces but very few branches; thriving best in rich earth.



ium elegans.

Det. in the bot. garden Aug. 1758. by H. Andrews.
N. S. Knightbridge.

PLATE XXIX.

IXIA SPICATA. *Var. viridi nigra.*

Sea-green spiked Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6 petala, patens, æqualis.
STIGMATA 3, erectiusculo-patula.

BLOSSOM fix petals, spreading, equal.
SUMMITS three, nearly upright, spreading.
See IXIA REFLEXA, Plate XIV.

SPECIFIC CHARACTER.

Ixia foliis linearibus, costatis; corolla viridi,
petalis basi obscuris; spicis longissimis.

Ixia with linear, ribbed leaves; green blossom,
the base of the petals dark; spikes very
long.

REFERENCE TO THE PLATE.

1. The two sheaths of the Empalement.
2. A Blossom cut open, to shew its tubular character, and the insertion of the Chives at the mouth.
3. The Pointal complete, one of its Summits magnified.

THE singularity of colour exhibited in this very fine species of *Ixia*, the extraordinary length of the spikes, the flowers of which are mostly all expanded at the same time; and which grow sometimes to the length of a foot, or more; will certainly entitle it to a place in every collection of exotics. We are indebted to the Hollanders for this plant, as they first introduced it from the Cape; and it is from them we received it but a few years since. It is amongst the hardiest, and easiest propagated of this genus; requiring a small degree of heat when near blowing, to make the flowers expand with lustre; thriving best in peat earth; propagating itself by the bulb; and flowering during the months of May and June.



spicata.
nigra.

PLATE XXX.
VACCINIUM ARCTOSTAPHYLLUS.
Madeira Whortle-berry.

CLASS VIII. ORDER I.
OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium minimum, superum, persistens.
COROLLA. Monopetala, campanulata, quadrifida; laciniis revolutis.
STAMINA. Filamenta octo, simplicia. Antheræ bicornes, dorso aristis duabus patentibus instructæ, apice dehiscentes.
PISTILLUM. Germen inferum. Stylus simplex, flaminibus longior. Stigma obtusum.
PERICARPIUM. Bacca globosa, umbilicata, quadrilocularis.
SEMINA pauca, parva.

EMPALEMENT. Cup very small, above, and permanent.
BLOSSOM. One petal, bell-shaped, four-cleft; segments rolled back.
CHIVES. Eight threads, simple. Tips with two horns, and furnished with two spreading awns at the back, opening at the points.
POINTAL. Seed-bud beneath. Shaft simple, longer than the chives. Summit blunt.
SEED-VESSEL. A globular berry, with a hollow dimple, and four cells.
SEEDS few, and small.

SPECIFIC CHARACTER.

Vaccinium, floribus racemosis; foliis crenulatis, ovatis, acutis; caule arboreo.

Whortle-berry, with flowers growing in bunches; leaves slightly scalloped, egg-shaped, and pointed; stem woody.

REFERENCE TO THE PLATE.

1. The Empalement, Pointal, and Chives; the blossom removed.
2. A Chive (magnified).
3. The Shaft, and its Summit (magnified).
4. A ripe Berry (natural size).

NUMEROUS are the difficulties which occur in arranging plants according to any yet invented system; and although the sexual fails in the fewest instances, yet that is sometimes the case. The plant before us, although in habit, fruit, &c. seemingly perfectly allied to *Vaccinium*, and, from which characters, it has been placed under that genus, yet we doubt whether if Linnæus had examined the flower himself, (as he has accepted it under the name it here bears, and we have no doubt of its being the plant intended;) he would not have classed it in *Octandria*; for certainly it has in every instance ten chives, with the border of the blossom of five segments; the threads attached to the blossom. But, as it is the professed intention of this work as little as possible to confuse, by the introduction of new names for plants already known by established, and generally accepted ones; though erroneous from incorrectness, or otherwise, in the author who first published them; we shall attempt an alteration but rarely, and that cautiously, or for very glaring reasons; being thoroughly convinced of the difficulty of retaining only one name for each plant. The *Vaccinium Arctostaphyllum* is a native of the island of Madeira, where it grows to a considerable height: it has not been many years cultivated in our gardens; having been introduced to us first by Mr. F. Masson about the year 1786. The winters in common of this climate are too severe for it, therefore should be protected, although it will survive a mild one: it is best preserved in a pot, and kept as a greenhouse plant, where it is very ornamental; flowering about the months of July and August; thriving best in light mould, or peat; and is propagated by cuttings, or the seed, which it produces in abundance.

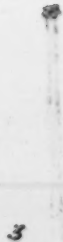


PLATE XXXI.
BORBONIA CORDATA.

Heart-shape leaved Borbonia.

CLASS XVII. ORDER IV.
DIADELPHIA DECANDRIA. Threads in two sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquefidum, turbinatum, corolla dimidio brevius; laciniis lanceolatis, acuminatis, subæqualibus.

COROLLA pentapetala papilionacea.
Vexillum reflexum, obtusum, ungue calycis longitudine.
Alæ femicordatæ, vexillo paulo breviores.
Carina dipetala, lunulata, obtusa.

STAMINA. Filamenta decem, coalita in cylindrum, superne longitudinaliter dehiscentem, apicibus assurgentia. Antheræ parvæ.

PISTILLUM. Germen subulatum. Stylus brevissimus, adscendens. Stigma obtusum, emarginatum.

PERICARPIUM. Legumen subrotundum, acuminatum, uniloculare, spina mucronatum.

SEMINA reniformia.

EMPALEMENT. Cup one leaf, cut into five segments, turban-shaped, shorter by half than the blossom; segments lance-shaped, pointed, nearly of the same length.

BLOSSOM of five leaves, butterfly-shaped.
Standard bent back, blunt, the claw the length of the cup.

Wings half heart-shaped, a little shorter than the standard.

Keel of two leaves, half moon-shaped, and blunt.

CHIVES. Threads ten, joined in a cylinder, splitting at the upper side, turned up at the ends. Tips small.

POINTAL. Seed-bud awl-shaped. Shaft short, turned up at the end. Summit blunt, and bordered.

SEED-VESSEL. Shell roundish, pointed, of one cell, and pointed with a spine.

SEEDS kidney-shaped.

SPECIFIC CHARACTER.

Borbonia foliis cordatis, multinerviis, integerimis.

Borbonia with heart-shaped leaves, many-nerved, and very entire.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Standard, or upper petal of the Blossom.
3. A Wing, or side petal of the Blossom.
4. The Keel, or lower petals of the Blossom.
5. The Pointal and Chives, natural size.
6. The Seed-vessel, attached to the Empalement.

THE Borbonia cordata, with its various synonyms, may be found in the second volume of Linnæus's Species Plantarum, page 994, from whence our specific character is copied. This plant, as well as most of the genus, are subject to lose their leaves from the lower part of the stem, which gives it rather a naked appearance when not in flower; but that is amply compensated by the very handsome appearance of its magnificent bunch of yellow blossoms. It grows to the height of three or four feet, producing but few branches. This figure was taken from a plant sent to the author, about the beginning of July, in full bloom, by Mr. Colville, nurseryman, of the King's Road, Chelsea; who informs him that he raised it about the year 1795, from seeds which he had received from the Cape of Good Hope. The Borbonias are mostly hardy greenhouse plants, and delight in light earth; either peat, or very light dungy earth: they are in general difficult to propagate by cuttings; the surest method is by the seed, which they for the most part perfect in this climate.



2



3



4



5



6

Corbonia cordata.

Sub. 2. on the *St. Helena* Sep. 1839. by H. Andrews
N. S. Knightbridge.

PLATE XXXII.

ANTHOLYZA RINGENS.

Gaping Antholyza.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves, alternatæ, flores distinguentes, persistentes.

COROLLA. Petalum unicum e tubo sensim dilatatum in faucem compressam, ringentem.

STAMINA. Filamenta tria, longa, tenuia, sublabio superiori. Antheræ acutæ.

PISTILLUM. Germen inferum. Stylus filiformis, situ et longitudine staminum superiorum. Stigma trifidum, capillare, reflexum.

PERICARPIUM. Capsula subrotunda, trilocularis, trivalvis.

SEMINA plura, triangularia.

EMPALEMENT. Sheath of two valves, alternate, dividing the flowers, and abiding.

BLOSSOM. One petal, widening in the tube, flattened at the mouth, and gaping.

CHIVES. Three threads, long, thin, and placed under the upper lip of the blossom. Tips sharp.

POINTAL. Seed-bud beneath. Shaft thread-shaped, in the same place, and of the same length of the upper chives. Summit cut into three hair-like divisions, which are bent back.

SEED-VESSEL. Capsule nearly round, three cells, three valves.

SEEDS many, triangular.

SPECIFIC CHARACTER.

Antholyza corollæ labiis divaricatis; fauce compressa.

Antholyza with the lips of the blossom in various directions; the mouth flattened.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, to shew the insertion of the Chives.
3. The Pointal (natural size).

ALTHOUGH this species of *Antholyza* is not new in our gardens, yet has it been seen in flower but by few, as it blows so seldom; though the roots are by far the largest of any of the genus. The bulb from which this figure was taken, had received a little assistance from heat early in the season, and by that means was (apparently) brought into flower. It is a native of the Cape of Good Hope, has much the appearance of a common flag in the foliage, growing to the height of three feet, or more; requires the same earth as *Ixias*, propagates by the root, or seed, and flowers in the month of June; at which time a drawing was made from a plant then in bloom at the Hammersmith nursery.



Thelypiza ringens.

Thelypiza ringens
by A. S. Peckham & H. S. Gurney

PLATE XXXIII.
DIOSMA LATIFOLIA.
Broad-leaved Diosma.

CLASS V. ORDER I.
PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quinquepartitum; laciniis tenuibus, acutis, persistentibus; basi plana.

COROLLA. Petala quinque, ovata, obtusa, sessilia, erecto-patula.
Nectarium coronæ forma, excavatum, quinquefidum, obtusum, germiini impositum.

STAMINA. Filamenta quinque, subulata. Antheræ subovatae, erectæ.

PISTILLUM. Germen coronatum nectario. Stylus simplex, longitudine staminum. Stigma obsoletum.

PERICARPIUM. Capsulæ quinque, ovato-acuminatae, compressæ, margine introrsum coalitæ, apicibus distantes, futura superiori dehiscentes.

SEMINA solitaria, oblonga.
Arillus elasticus, hinc dehiscens; singulum involvens semen.

EMPALEMENT. Cup of four divisions; segments thin, sharp, and permanent; smooth at the base.

BLOSSOM. Five petals, egg-shape, blunt, fitting close, erect, and open.
Honey-cup crown-shaped, hollow, with five divisions, blunt, fixed on the seed-buds.

CHIVES. Five threads, awl-shaped. Tips nearly egg-shaped, upright.

POINTAL. Seed-bud crowned by the honey-cup. Shaft simple, the length of the chives. Summit blunt.

SEED-VESSEL. Five capsules, egg-shaped, pointed, flattened, joined together by the inner edge, the points standing apart, splitting at the upper future.

SEEDS solitary, oblong.
Seed-coat elastic, splitting from hence, and inclosing a single seed.

SPECIFIC CHARACTER.

Diosma, foliis oppositis, ferratis, ovalibus, latissimis; floribus terminalibus, albidis, sessilibus.

Diosma with opposite leaves, sawed, oval, and very broad; flowers terminal, white, and fitting close to the branches.

REFERENCE TO THE PLATE.

1. A Blossom complete.
2. The Chives and Pointal, with the surrounding Seed-buds and Honey-cups.
3. The Pointal, natural size, with the Empalement attached.
4. The same magnified.
5. A Seed taken from its coat.

THERE are few genera of plants more deserving our notice than *Diosma*; the fragrance of the leaves of most of the species, and the beauty of the flowers of others, has rendered them so common, (being easily propagated by cuttings) that few collections but have a number of the different species. They are all very hardy greenhouse plants, the present species excepted; this, requiring a dry situation, and rather more warmth than the rest. It was sent to the royal gardens at Kew, about the year 1791, by Mr. F. Masson, to whose industry botany stands so much indebted. Of all the *Diosmas* this is the highest grower, aspiring to three or four feet, or more, if encouraged; delights in peat earth, and flowers about the month of August.

PLATE XXXIV.
CHELONE RUELLIOIDES.
Scarlet Chelone.

CLASS XIV. ORDER II.
DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinque-partitum, brevissimum, persistens; laciniis erectis, ovatis.

COROLLA monopetala, ringens; tubus cylindraceus, brevissimus; faux inflata, oblonga, supra convexa, infra plana; limbus clausus parvus; labium superius obtusum, emarginatum; limbus inferius cum superiori fere æquale, lævissime trifidum.

STAMINA. Filamenta quatuor, sub dorso corollæ recondita, quorum duo lateralia paulo longiora; antheræ incumbentes.

Rudimentum quinti filamenti, mucronis instar, intra superius staminum par.

PISTILLUM. Germen ovatum. Stylus filiformis, situ, et longitudine staminum. Stigma obtusum.

PERICARPIUM. Capsula ovata, bilocularis, calyce longior.

SEMINA plurima, sub rotunda, margine membranaceo cincta.

EMPALEMENT. Cup one leaf, five divisions very short, permanent; segments upright and egg-shaped.

BLOSSOM. One petal, gaping; tube cylindrical, very short; mouth swelled, oblong, rounded on the upper, and flat on the lower part; border shut, and small; upper lip blunt, bordered; lower lip nearly as long as the upper, slightly divided into three at the end.

CHIVES. Threads four, hid under the upper part of the blossom; of which the two side ones are a little longer than the others. Tips fixed sideways to the threads.

The rudiment of a fifth thread, like a sharp point is placed equal with, and between the upper chives.

POINTAL. Seed-vessel egg-shaped. Shaft thread-shaped, of the same length, and place as the chives. Summit blunt.

SEED-VESSEL. Capsule egg-shaped, two cells longer than the empalement.

SEEDS many, nearly round, bound at the edge by a thin skin.

SPECIFIC CHARACTER.

Chelone foliis inferioribus spathulatis, glabris; superioribus lanceolatis, oppositis; corollis cernuis, coccineis; labiis inferioribus barbatis.

Chelone with spathulate, smooth leaves on the lower part of the stem; and lance-shaped, opposite ones on the upper; blossoms hanging down, and scarlet; the lower lips bearded.

REFERENCE TO THE PLATE.

1. A Leaf from the lower part of the Stem.
2. The Empalement.
3. A Blossom cut open, to shew the situation of the Chives, and the imperfect rudiments of a fifth.
4. The Seed-vessel, and Pointal, (natural size).

THE *Chelone Ruellioides* is a native of Chili, South America, and was introduced to the royal gardens at Kew in the year 1793, by Mr. Boutelow, the son of the gardener to the King of Spain, who was then in England pursuing his botanical studies. It is (apparently) a hardy plant, and fit to endure the open borders, but, as yet, we have not had a sufficient trial to ascertain it; hitherto it has been treated as a greenhouse plant. Being herbaceous, it is propagated by parting the roots, which should be done in spring, about the month of March. The proper season of its flowering cannot well be determined, as it has undergone such various treatment. The plant from which this figure was made was in full bloom at the gardens of G. Hibbert, Esq. Clapham, in the month of June 1797, where it was seen to flower, for the first time in this country. The soil it seems to thrive in most, is a composition of loam, and rotten dung.



Viola radialis.

PLATE XXXV.

IXIA CRISPIFOLIA. *Var. flore cæruleo.*

Crisped-leaved Ixia. Blue Variety.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. Stigmata 3,
erectiusculo-patula.

BLOSSOM six petals, spreading equal. Summits
three, nearly upright, and spreading.
See IXIA REFLEXA, Plate XIV.

SPECIFIC CHARACTER.

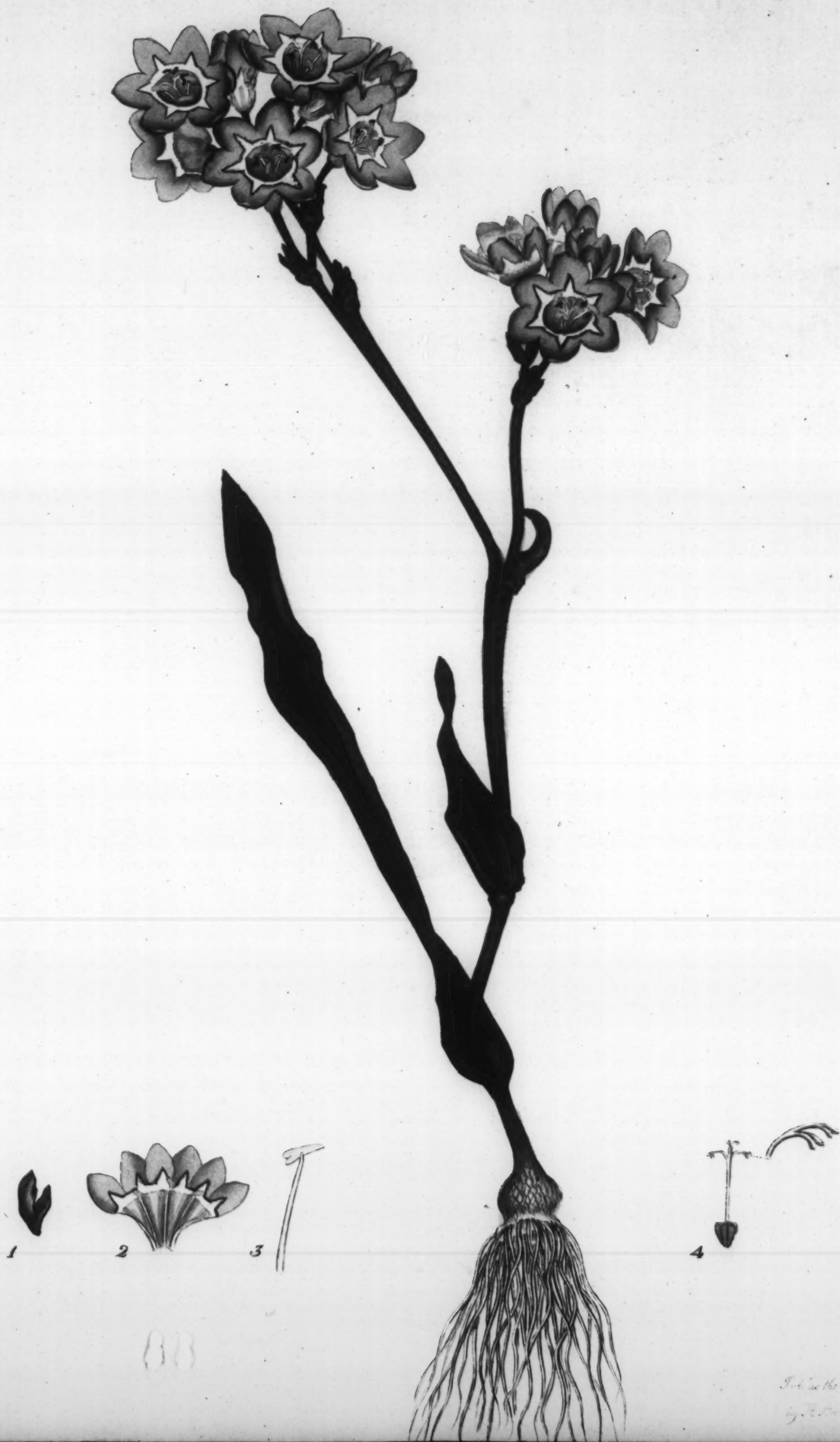
Ixia foliis crispis; scapus ramosus, flexuosus,
spithamæus; floribus sub-umbellatis, cæru-
leis.

Ixia with crisped leaves; flower-stem branched,
waved, and a span high; flowers grow in
partial umbels, and are blue.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement.
2. A Blossom cut open, to shew the insertion of the Chives.
3. A Chive (magnified).
4. The Pointal, one of the divisions of the Summit detached, and magnified.

THIS singular species of Ixia, is one amongst the many given by the Dowager Lady De Clifford to Messrs. Lee and Kennedy Hammermith, in the year 1794; at which time, her ladyship had just received the bulbs in a present from the Cape. It is described by Thunberg, in his *Dissertatio de Ixia*, published in 1783. The root of this plant is of a most curious shape, having the appearance of being the half, rather than the whole; it is very delicate, is easily destroyed by moisture, therefore (except when in flower) should be kept very dry; it propagates by the root, the old one generally producing two; flowering about the month of June, or July, but requires the warmth of a moderate hothouse to expand its blossoms. Like other Cape bulbs, it should be planted in sandy peat.



Saxia crispifolia.
Var. flore caeruleo.

Printed by the Rev. John G. ...
by J. G. ...

PLATE XXXVI.

RHODODENDRON PUNCTATUM.

Dotted-leaved Rhododendron.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX 5-partitus. Corolla rotato-infundibuliformis. Stamina declinata. Capsula 5-locularis.

EMPALEMENT of five divisions. Blossom of a rounded funnel-shape. Chives bent downward. Capsule of five cells.

See RHODODENDRON DAURICUM, Plate IV.

SPECIFIC CHARACTER.

Rhododendron foliis glabris, subtus punctatis; viminibus laxis; corollis crispis, violaceo-purpureis.

Rhododendron with smooth leaves, dotted on the under part; slender loose branches; blossoms crisped, and of a blueish purple.

REFERENCE TO THE PLATE.

1. A Blossom.
2. The Chives, and Pointal (natural size); one tip detached (magnified).
3. The Seed-vessel, and Pointal, (natural size).

It is to the industrious researches of J. Frazier, nurseryman, of the King's Road, Chelsea, we are indebted for this charming species of Rhododendron, who introduced it in the year 1792 from the back settlements of Carolina, North America, where it is native. This species is by far the most delicate of any yet discovered on that continent; grows to the height of three, or four feet, and of sufficient hardness to resist our winters in the open ground; a slight protection insures its flowering, as our late frosts are apt to injure the buds, which are very often without that assistance destroyed. The best method of propagating this shrub is by layers, which should be taken off in autumn, and protected the first winter. It flowers about the month of July, at which season this year a drawing was made from a plant, in the nursery of Lee and Kennedy, Hammer-smith. It (like most American plants) delights in sandy peat.



Rhododendron punctatum.

Pub. as the Act directs Oct. 1. 1798.
by H. Andrews N^o 3. Tinsleybridge.

PLATE XXXVII.

GERANIUM FRAGILE.

Brittle-stalked Geranium.

CLASS XVI. ORDER II.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata 5. Fructus rostratus, 5-coccus.		ONE POINTAL. Summits five. Fruit furnished with long awns, five dry berries. See GERANIUM GRANDIFLORUM, Plate XII.
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SPECIFIC CHARACTER.

Geranium foliis carnosif, pinnatis; caulis fruti- cosus, ramosus, fragilis; petalis linearibus, pedunculis erectis.		Geranium with fleshy winged leaves; stem shrubby, branched and brittle; petals linear, fruit-stalks upright.
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REFERENCE TO THE PLATE.

1. The Empalement cut open, to shew its tubular shape to its base.
2. The Chives, and Pointal, (natural size).
3. The Pointal, (magnified).

THE Geranium fragile has in general seven fertile tips, and thus comes under Linnæus's first arrangement; and Monf. L'Heritier's Genus Pelargonium. It is a native of the Cape of Good Hope, and was introduced by Messrs. Lee and Kennedy in the year 1792. This plant seldom grows more than a foot high, but during the months of July, August, and September, it is covered with blossoms, which are of a pale yellow, striped at the bottom with red, standing nearly upright. It is rather a tender plant, requiring a dry stove, or hothouse, to preserve it in winter, being very subject to damp in the leaves; is easily propagated by cuttings, and thrives best in rich mould.



Geranium fragile.

PLATE XXXVIII.

GLADIOLUS PRÆCOX. *Var. flore rubro.*

Red early-flowering Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, ringens.
STAMINA adscendentia.

Blossom six divisions, gaping.
CHIVES ascending.
See Plate XI. GLADIOLUS ROSEUS.

SPECIFIC CHARACTER.

Gladiolus foliis ensiformibus, apicibus tortis,
lineari-cruciatis; corollis sub-campanula-
tis, rubris; petalis acuminatis.

Gladiolus with sword-shaped leaves, twisted at
the ends, linear, and cross-shaped; blossoms
nearly bell-shaped, and red; petals sharp-
pointed.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement.
2. A Blossom cut open, to expose the situation of the Chives.
3. The Pointal, one of the Summits magnified.
4. A Seed.

Of all the species of this numerous Genus, this is the first to expand its blossoms, seldom flowering later than April; is extremely hardy, scarce requiring the warmth of a greenhouse for its protection, although a native of the Cape. About the year 1791, the bulbs of this plant were purchased of Messrs. Voorhelm, and Co. of Haarlem, in Holland, by Messrs. Lee and Kennedy, Hammer Smith, at whose nursery it has repeatedly flowered, and where this figure was taken. It is propagated by the root, as other Gladiolus, and requires the same earth, a light sandy peat.



Gladiolus pinnatifidus
Var. *pinifolius*

PLATE XXXIX.

ECHIUM FEROCISSIMUM.

Prickly Viper's Buglofs.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA irregularis, fauce nuda.

|| Blossom irregular, mouth naked.
See ECHIUM GRANDIFLORUM, Plate XX.

SPECIFIC CHARACTER.

Echium caule fruticoso; ramis, foliisque aculeatis; floribus spicatis, violaceis; corollis sub-æqualibus.

|| Viper's Buglofs, with a shrubby stem; branches and leaves covered with sharp prickles; flowers growing in spikes, and violet coloured; blossoms nearly equal.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, to shew the insertion of the Chives in the tube.
3. The Shaft and its Summit, magnified.

ALTHOUGH there are few species of this genus, but are rough, or hairy; yet this by far exceeds any of them, or almost any other plant not actually spiny, for its extreme coarseness to the touch; nevertheless it is a very handsome shewy greenhouse plant, growing to the height of two feet, and blowing freely. It is a native of the Cape of Good Hope, and was introduced by Messrs. Lee and Kennedy in 1794; at whose nursery it flowered for the first time, this year, in the month of July. The only method of propagating the Cape Echiums is by cuttings, and that is done with great difficulty; of course, this, as well as the other species, are very scarce: they delight most in rich light mould.



Geranium procerissimum.

Geranium procerissimum. L. f. Geranium.

PLATE XL.

CHELONE CAMPANULOIDES.

Bell-flowered Chelone.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

ESSENTIAL GENERIC CHARACTER.

CALYX 5-partitus. Rudimentum filamenti quinti inter suprema stamina. Capsula bilocularis.

EMPALEMENT of five divisions. The rudiment of a fifth thread is found placed between the upper chives. Capsule of two cells. See Plate XXXIV. *CHELONE RUELLIODES.*

SPECIFIC CHARACTER.

Chelone foliis oppositis, sessilibus, acuminatis, profunde serratis; corollis campanulatis, purpureis.

Chelone with opposite leaves fitting close to the stem, tapering to the point, and deeply sawed; blossoms bell-shaped, and purple.

REFERENCE TO THE PLATE.

1. A Blossom cut open, to shew the situation of the four Chives, and station of the fifth imperfect thread.
2. The Pointal, (natural size).
3. The Seed-vessel, with the Empalement and Shaft still remaining attached.

THIS species of *Chelone* is of the same date in our gardens as the *Chelone Ruellioides*, and was introduced through the same medium: it is a native of Mexico in South America; will make a pretty addition to our greenhouse exotics; and is described and engraved by A.J. Cavanilles, in his first volume of Spanish plants. It seems to thrive best in rich, dungy earth, and is easily propagated by cuttings, or seeds; of which latter it produces abundance; but does not appear to be long lived. The plant from which this figure was taken, flowered (as we suppose for the first time in England) in the collection of B. Robertson, Esq. of Stockwell in Surry, and kindly communicated by him to the author.



Phelone campanulata.

PLATE XLI.
LACHENALIA PENDULA.

Drooping-flowered Lachenalia.

CLASS VI. ORDER I.
HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX, nullus.

COROLLA monopetala, cylindracea, sexpartita; tubus gibbus; laciniis tribus exterioribus brevioribus.

STAMINA. Filamenta sex, subulata, longitudine corollæ, inserta basi laciniarum corollæ. Antheræ oblongæ, incumbentes.

PISTILLUM. Germen trigonum, trifidum. Stylus simplex, corolla paulo longior. Stigma obtusum.

PERICARPIUM. Capsula triquetra, trilocularis, trivalvis.

SEMINA plurima, globosa.

EMPALEMENT, none.

BLOSSOM one leaf, cylindrical, divided into six; tube gouty; the three outer divisions the shortest.

CHIVES. Threads six, awl-shaped, the length of the blossom, fixed into the base of the divisions of the blossom. Tips oblong, laying on the threads.

POINTAL. Seed-bud three-sided, three-furrowed. Shaft simple, a little longer than the blossom. Summit blunt.

SEED-VESSEL. Capsule three-sided, three cells, three valves.

SEEDS many, globular.

SPECIFIC CHARACTER.

Lachenalia foliis longissimis, ovato-oblongis, immaculatis; corollis speciosissimis, maximis, tricoloratis, pedunculatis, cernuis.

Lachenalia with very long egg-shaped oblong leaves, without spots; blossoms very showy, large, three-coloured, having foot-stalks, and nodding.

REFERENCE TO THE PLATE.

1. A Flower spread open, to shew the insertion of the Chives.
2. The same, exhibiting the character of the outer Petals.
3. The Pointal, natural size.

THE genus *Lachenalia* is certainly an infringement on *Hyacinthus*; the small distinction on which this new genus is founded can, at most, be considered but of sufficient consequence to form a specific character; so thought Linnæus: the son of Professor Jacquin has thought otherwise, having called it after a botanist of the name of De la Chenal; and under which it is now generally known; therefore we have not replaced it under its old title, though we have authority of such weight to corroborate our opinion. The *Lachenalias* are natives of the Cape of Good Hope, yet are of so hardy a nature as to require no farther protection than shelter from the severe frosts. Our species is the handsomest yet known, flowering about September; was, according to the Kew catalogue, introduced there by Mr. F. Masson in the year 1774. It was from a plant in the extensive collection of G. Hibbert, Esq. Clapham Common (to whose kind communications the author acknowledges himself much indebted), that this figure was taken, the latter end of September this year. No plant is more easy or certain to increase than this; the young offsets are produced in such abundance from the old bulb, which delights in a light soil; but its flowering is not so certain.



Lachenalia pendula.

Des. et. Sculp. J. B. Smith. 1848.
 et. J. B. Smith. 1848.

PLATE XLII.
ORCHIS CILIARIS.
Fringed Orchis.

CLASS XX. ORDER I.
GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

GENERIC CHARACTER.

CALYX. Spathæ vagæ. Spadix simplex. Perianthium nullum.

COROLLA. Petala quinque; tria exteriora; duo interiora sursum conniventia in galeam.

Nectarium monophyllum, a latere inferiore inter divisuram petalorum receptaculo affixum. Labio superiore erecto, brevissimo. Labio inferiore magno, patente, lato. Tubo postice corniformi, nutante.

STAMINA. Filamenta duo, tenuissima, brevissima, pistillo infidentia. Antheræ obovatæ, erectæ, tectæ duplicatura biloculari labii superioris nectarii.

PISTILLUM. Germen oblongum, contortum, inferum. Stylus adnatus labio superiori nectarii, brevissimus. Stigma compressum, obtusum.

PERICARPIUM. Capsula oblonga, unilocularis, tricarinata, trivalvis; sub carinis trifariam dehiscens, apice et basi cohærens.

SEMINA numerosa, minima.

EMPALEMENT. Sheaths scattered. Fruit-stalk simple. Cup none.

BLOSSOM. Petals five; three outer ones; two inner ones approaching upwards in form of a helmet.

Honey-cup one leaf, fixed by the lower side to the receptacle betwixt the division of the petals. Upper lip upright, and very short. Lower lip large, spreading, broad. Tube standing behind, shaped like a horn, and hanging down.

CHIVES. Two threads, very slender, and very short, fixed on the pointal. Tips inversely egg-shaped, upright, covered by a folding of the upper lip of the honey-cup, forming two cells.

POINTAL. Seed-bud oblong, twisted, and beneath. Shaft fixed to the upper lip of the honey-cup, very short. Summit flattened, and blunt-ended.

SEED-VESSEL. Capsule oblong, of one cell, three keels, three valves; splitting in three places under the keels; fastened at the point, and the base.

SEEDS numerous, very small.

SPECIFIC CHARACTER.

Orchis radicibus subpalmatis, expansis; nectarii labio lanceolato, ciliato, cornu torto, longissimo; floribus luteis.

Orchis with roots nearly hand-shaped, spreading; lip of the honey-cup lance-shaped, and fringed, horn twisted, very long; flowers yellow.

REFERENCE TO THE PLATE.

1. The Honey-cup with its Horn.
2. The upper Petal.
3. A side Petal.
4. One of the inner Petals.
5. The Chives, and Pointal attached to the horn of the Honey-cup.
6. The Chives, and Pointal, magnified; with the Chives drawn from their cells.

THIS handsome *Orchis* is a native of North America, and is found in all the states from Virginia as far north as Canada: it has been treated of by Ray, Morison, Gronovius, Royen, Linnæus, and others; but although so long known by name, it was not introduced to our gardens before the year 1796; having been sent that year from Philadelphia by Mr. J. Lyons, from the gardens of J. Hamilton, Esq. to Messrs. Lee and Kennedy, Hammersmith; at whose nursery it flowered this year, in the month of July, when the drawing was made. It is a hardy herbaceous plant, thriving best in a shady border, and should be planted in a mixture of loam and peat earth. The propagation of this plant, like most of the genus, is difficult, the seeds being too small to be collected, and the root seldom producing more than one bud.



Orchis ciliaris.

Orchis ciliaris - Des. super. by H. Anson.
W. & J. Smith.

PLATE XLIII.
BIGNONIA LEUCOXYLON.

Oleander-flowered Trumpet Flower.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, erectum, cyathi-forme, quinquefidum.

COROLLA monopetala, campanulata; tubus minimus, longitudine calycis; faux longissima, subtus ventricosa; limbus quinque partitus; laciniis duabus superioribus reflexis; inferioribus patulis.

STAMINA. Filamenta quatuor, subulata, corolla breviora, quorum duo reliquis longiora. Antheræ reflexæ, oblongæ, velut duplicatæ.

PISTILLUM. Germen oblongum. Stylus filiformis, situ et figura staminum. Stigma capitatum.

PERICARPIUM. Siliqua bilocularis, bivalvis.

SEMINA plurima, imbricata, compressa, utrinque membranaceo alata.

EMPALEMENT. Cup one leaf, upright, cup-shaped, and cut into five divisions.

BLOSSOM of one bell-shaped petal; tube small, the length of the cup; mouth very long, swelled at the bottom; border of five divisions; the two upper segments reflexed, the lower ones spreading.

CHIVES. Threads four, awl-shaped, shorter than the blossom, two of which are longer than the others. Tips bent back, oblong, and appear doubled.

POINTAL. Seed-bud oblong. Shaft thread-shaped, of the same situation and shape as the chives. Summit headed.

SEED-VESSEL. Pod of two cells, and two valves. **SEEDS** many, laying one over the other, flat, and winged at each side.

SPECIFIC CHARACTER.

Bignonia foliis digitatis; foliolis integerrimis, ovatis, acuminatis; caule erecto, arboreo; floribus neri; alato femine.

Trumpet Flower with fingered leaves; the small leaves entire, egg-shaped, tapered; stem upright, growing to a tree; with flowers like the oleander; seed winged.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, shewing the proportionate length of the Chives to the Blossom, and their insertion; one of the Tips detached, and magnified.
3. The Pointal, (natural size); the Summit detached, and magnified.

THIS species of *Bignonia* is well known in most collections of hothouse plants, and was first introduced to the Chelsea gardens by Mr. P. Miller, the then gardener, in 1759, and may be found described in his Dictionary; but, notwithstanding its frequency, few have seen its blossoms. Owing to the naked appearance of the stem, and its growing to so considerable a height before it flowers, and that but rarely, has rendered it a plant but of little consideration; though perhaps, from the great beauty of its blossoms, it deserves more attention. Being a native of the West Indies, it does not flourish without the assistance of tan heat; but will live in any situation of the hothouse; thriving best in a mixture of loam and peat, and is readily propagated by cuttings. It was from a plant in the select and valuable collection at Paddington, belonging to the Hon. Dowager Lady De Clifford (to whom the author, as well as all the cultivators and professors of the science, stand much indebted for the zeal and patronage which her ladyship has shewn, in her endeavours to promote it), that this figure was taken in July this present year 1798.



Bignonia Leucoxydon.

Feb. is the last name Jan. 1. 1742 of H. Andrews
W. S. Priggenbridge

PLATE XLIV.

IXIA CINNAMOMEA.

Cinnamon-smelling Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. Stigmata
tria, erectiusculo patula.

Blossom six petals, spreading, and equal. Sum-
mits three, nearly upright, spreading.
See IXIA REFLEXA, Plate XIV.

SPECIFIC CHARACTER.

Ixia foliis falcatis, crispis; floribus alternis, nocti-
florens, cinnamomi odore.

Ixia with scimitar-shaped leaves, waved at the
edge; flowers alternate, blowing at night,
and smelling of cinnamon.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Flower cut open, with the Chives attached.
3. The Chives, attached to the tubular part of the Blossom, the border cut off, (magnified).
4. The Shaft, Summit, and Seed-bud, (magnified).

AMONGST this most extensive genus no species stands more distinct than this. The extreme sweetness and delicacy of its blossoms, which expand only by night, and close in the morning, give it a decided superiority over many of its congeners. Thunberg, who saw it at the Cape, has described it under the name it here bears; but till the year 1792 we had no knowledge of it, when it was first introduced by Messrs. Lee and Kennedy, Hammer Smith, from the Cape of Good Hope; at whose nursery it flowered the following year; where it continues to blow annually, and whence this figure was taken. It is rather a tender bulb, small, and easily rotted; should therefore be placed in the warmest part of the greenhouse, and kept dry when out of flower; is rather difficult to increase, as each bulb seldom produces more than one offset, nor that always, and rarely feeds.



Ixia cinnamomea.

Ixia cinnamomea L. f. *Sp. Pl.* 1099. t. 1. f. 1. *Fl. Indica* 1790. p. 109. t. 1. f. 1. *Bot. Beecheyana* 1847. p. 109. t. 1. f. 1.

PLATE XLV.
IRIS LONGIFOLIA.
Long-leaved Iris.

CLASS III. ORDER I.
TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves, flores distinguentes, persistentes.

COROLLA sexpartita; petala oblonga, obtusa, tria exteriora reflexa, tria interiora erecta, acutiora; omnia unguibus conata.

STAMINA. Filamenta tria, subulata, petalis reflexis incumbentia. Antheræ oblongæ, rectæ, depressæ.

PISTILLUM. Germen inferum, oblongum. Stylus simplex, brevissimus. Stigma maximum, tripartitum, laciniis petala mentientibus, latis, reflexis, stamina et petala alterna deprimentibus, apicibus bifidis.

PERICARPIUM. Capsula oblonga, angulata, trilocularis, trivalvis.

SEMINA plurima, ovata, glabra.

EMPALEMENT. Sheaths of two valves, separating the flowers, permanent.

BLOSSOM with six divisions; petals oblong, blunt, the three outer ones reflexed, the three inner ones upright, and sharper; all connected by the claws.

CHIVES. Threads three, awl-shaped, laying on the reflexed petals. Tips oblong, straight, depressed.

POINTAL. Seed-bud beneath, oblong. Shaft simple, very short. Summit very large, divided into three segments, resembling petals, broad, bent back, and alternately pressing down the chives and petals, cleft at the ends.

SEED-VESSEL. Capsule oblong, angular, of three cells, and three valves.

SEEDS many, egg-shaped, and smooth.

SPECIFIC CHARACTER.

Iris foliis linearibus, canaliculatis, longissimis, glaucis; scapus teres, multiflorus; radix bulbosus.

Iris with linear, channelled leaves, very long, and bluish; flower-stem cylindrical, with many flowers; the root bulbous.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement.
2. The Chives as attached to the Seed-bud.
3. The Pointal complete.

THIS *Iris* is a native of the Cape of Good Hope, and was introduced to us from the collection of Messrs. Voorhelm and Schnevoght, of Haarlem in Holland, about the year 1792. The leaves of this delicate *Iris* grow sometimes to the length of three feet, giving it a very singular appearance: it should be treated like the Cape *Ixias*, and protected from the weather, whilst in bloom, as the flower is injured by the lightest wind, and the duration of each blossom is but a few hours; there is, however, a good succession, which rise diurnally from the same sheath, seldom more than one at a time. This figure was taken in the month of June 1797, at the Hammersmith nursery. It has a singular mode of propagating itself; the old root dying, two young ones are formed above it, from whence the flower-stem arises: seldom ripe seeds are produced.



Iris longifolia.

PLATE XLVI.
MASSONIA VIOLACEA.
Purple-flowered Massonia.

CLASS VI. ORDER I.
HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX, nullus.
COROLLA sex-petala. Petala nectario imposita, lanceolata, patentia.
Nectarium inferum, cylindricum, membranaceum.
STAMINA. Filamenta sex, nectarii dentibus inferta, filiformia declinata, petalis paulo longiora. Antheræ ovatæ.
PISTILLUM. Germen (respectu nectarii) superum. Stylus subulatus, declinatus, longitudine, staminum. Stigma simplex, acutum.
PERICARPIUM. Capsula triquetra, glabra, trilocularis, trivalvis, angulis dehiscens.
SEMINA plurima, globosa, glabra, magnitudine feminum sinapios.

EMPALEMENT none.

BLOSSOM six-petals. Petals placed on the honey-cup, are lance shaped and spreading.
Honey-cup beneath, cylindrical and skinny.

CHIVES. Six threads, fixed into the teeth of the honey-cup, thread-shaped, bent downward, and a little longer than the petals. Tips egg-shaped.

POINTAL. Seed-bud (with regard to the honey-cup) above. Shaft awl-shaped, and bent downward the length of the chives. Summit simple, and pointed.

SEED-VESSEL. Capsule three-sided, and smooth, of three cells and three valves, splitting at the angles.

SEEDS many, globular, smooth, the size of a mustard seed.

SPECIFIC CHARACTER.

Massonia, foliis spathulatis, glabris; scapus filiformis, erectus, bipollicaris; flores pedunculati, violacei, sparsi, pedunculi uniflori.

Massonia with spatula-shaped, and smooth leaves; flower-stalk thread-shaped, upright, two inches high; the flowers have foot-stalks, are of a violet colour, and grow scattered; the foot-stalks have each but one flower.

REFERENCE TO THE PLATE.

1. A Flower complete.
2. The same cut open, to shew the infertion of the Chives.
3. The Pointal.

THIS genus of plants perpetuates the name, as a botanist, (would it could likewise the mild, unassuming, and universally allowed amiableness of character) of Mr. Francis Masson, botanical collector to his Majesty; now exploring the untrod regions of North America, to add to the extensive collections of his royal and munificent Master, which stand so much indebted to his indefatigable industry for their present splendour. The *Massonias* are all rather tender, and require the same situation as *Hæmanthus* &c; that is, a dry stove; they are natives of the Cape of Good Hope, or, at least, grow within that point of Africa generally so called, but at some distance from the Cape town, near a mountain (according to Thunberg) of the name of Bocklands Berg. The root of this species is very subject to rot when the leaves are decayed, if watered at that time; therefore, like the *Ixias*, should be put aside, or taken out of the pot for two or three months, after flowering. It is very difficult to propagate, as the seeds are seldom perfected, and rarely makes any offsets; flowering in September; about the beginning of which month this figure was taken, from a plant in the collection of G. Hibbert, Esq. Clapham Common. It appears to thrive best in a mixture of peat and sandy loam.

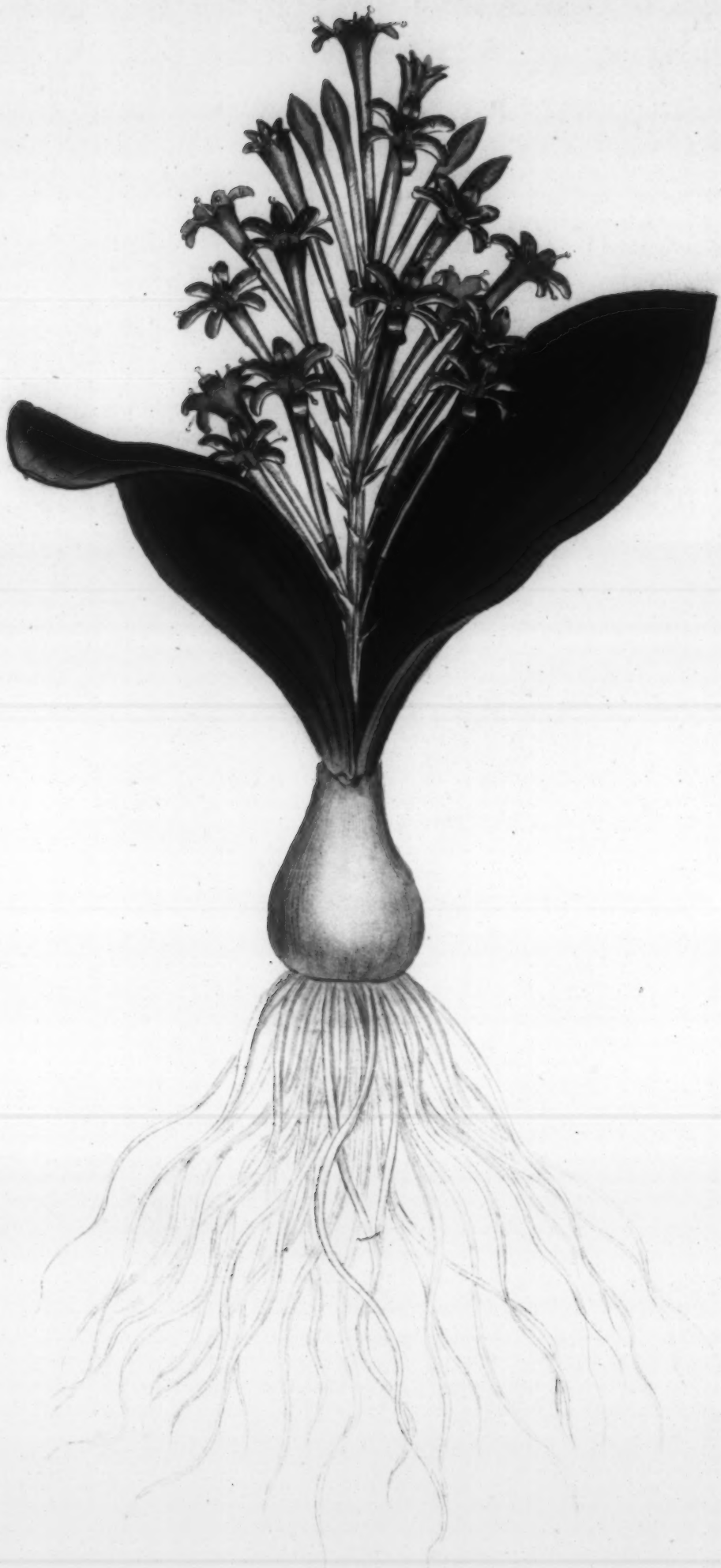


PLATE XLVII.
MUSA COCCINEA.
Scarlet-flowered Plantain-tree.

CLASS XXIII. ORDER I.
POLYGAMIA MONOECIA. Various dispositions. Upon one Plant.

GENERIC CHARACTER.

Hermaphroditi feminei flores.

CALYX. Spatha partialis ovato-oblonga, plano-concava, magna.
COROLLA inæqualis, ringens; petalo constituyente labium superius, nectario vero labium inferius.
Petalum erectum, ligulatum, quinquedentatum, basi antice connivens.
Nectarium monophyllum, naviculare, petalo, brevius, intra finum petali insertum.
STAMINA. Filamenta sex, subulata erecta, petalo dimidio breviora. Antheræ abortivæ.
PISTILLUM. Germen infra receptaculum floris, maximum, longissimum. Stylus erectus, longitudine petali. Stigma capitatum, subrotundum.
PERICARPIUM. Bacca carnosæ, corio testæ, longissima, pulpa trifariam, absque dissepimentis.
SEMINA plurima, globosa.

Hermaphroditi masculi flores.

CALYX ut in feminæo.
COROLLA ut in feminæo.
STAMINA. Filamenta ut in feminæo, at longiora, tenuiora. Antheræ lineares, fulcatæ, erectæ, magnæ.
PISTILLUM. Germen ut in feminæo, ut minus. Stylus, et stigma ut in feminæo, at minor.
PERICARPIUM abortit.

Hermaphrodite flowers, where the female parts are perfect.

EMPALEMENT. Partial sheath oblong, egg-shaped, smoothly-concave, and large.
BLOSSOM unequal and gaping; the petal forming the upper lip, the honey-cup the under.
Petal upright, ligulate, five-toothed, and meeting at the base in front.
Honey-cup one leaf, ship-shaped, shorter than the petal, and inclosed within it.
CHIVES. Threads six, awl-shaped, upright, shorter by half than the petal. Tips abortive.
POINTAL. Seed-bud below the receptacle of the flower, large and very long. Shaft upright the length of the petal. Summit headed, nearly round.
SEED-VESSEL. A fleshy berry, covered with a tough skin, very long, the pulp laying three ways, without partitions.
SEEDS many, round.

Hermaphrodite flowers, where the male parts are perfect.

EMPALEMENT as in the female flower.
BLOSSOM as in the female flower.
CHIVES. Threads as in the female flower, but longer, and thinner. Tips linear, channelled, upright, and large.
POINTAL. Seed-bud the same as in the female, but smaller. Shaft and summit like the female, but smaller.
SEED-VESSEL is abortive.

SPECIFIC CHARACTER.

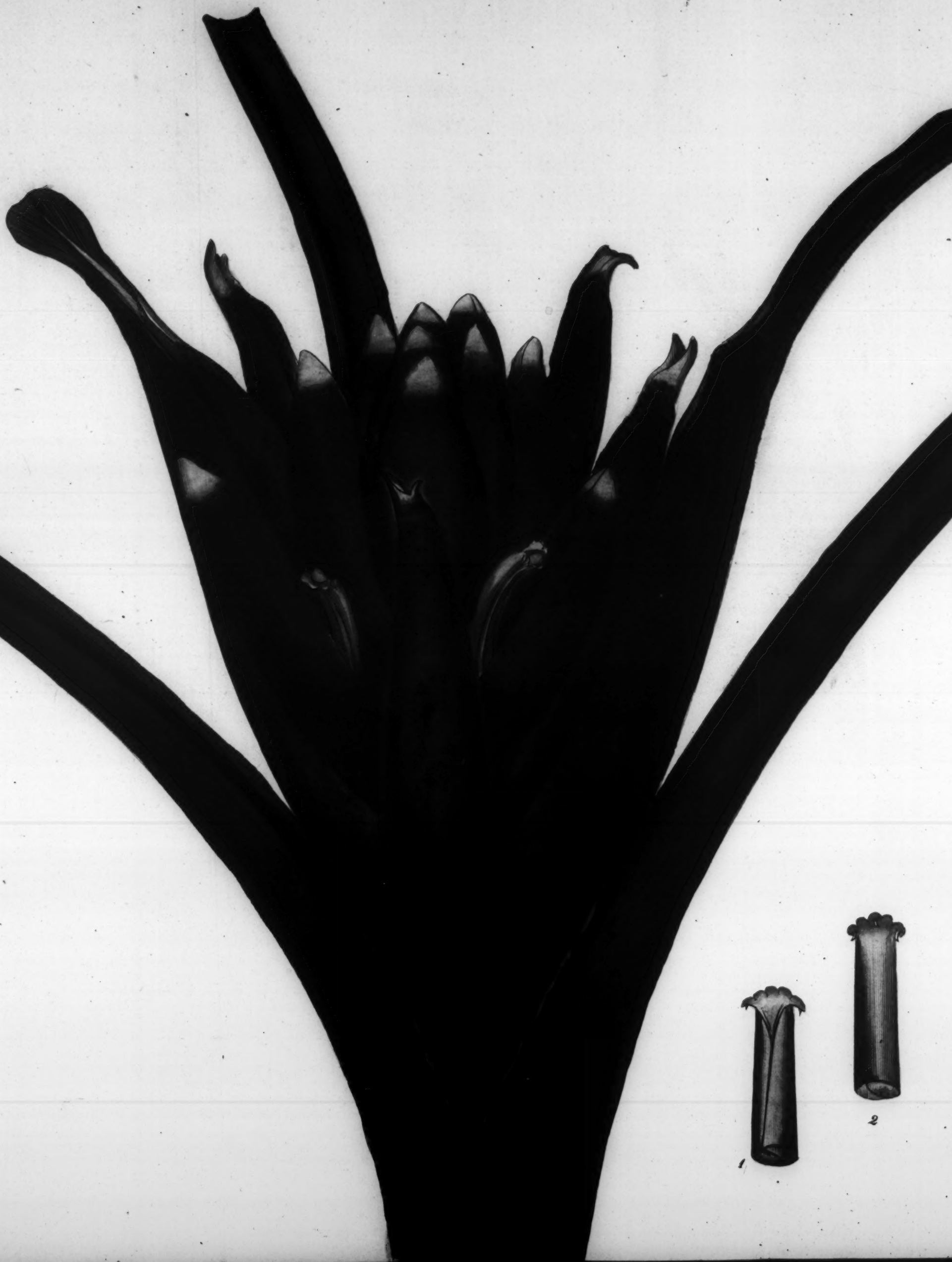
Musa spadice erecto; floribus capitatis; spathis confertis, coccineis, maximis, apicibus luteis.

Plantain-tree with an upright fruit-stalk; flowers growing in heads; sheaths crowded together, scarlet, very large, points yellow.

REFERENCE TO THE PLATE.

1. The upper lip of the blossom, shewn in front, as cut off close to the seed-bud.
2. The same, shewing the hinder parts, with the three small claws on the border.
3. The honey-cup, which forms the lower lip of the blossom.
4. The seed-bud, chives, style, and summit, of a female hermaphrodite flower.
5. A seed-bud cut obliquely, to expose the situation character of the seeds.
6. The chives, seed-bud, shaft, and summit, of a male hermaphrodite flower.

THE honour of having introduced this supremely beautiful plant, pertains to, Thomas Evans Esq. of Stepney; a gentleman to whose zeal for the introduction of new plants our stoves are of late much beholden; he having received it, amongst many others, about the year 1792 from China, where, as well as in Cochin-China, Sumatra, Java, &c. it is very commonly found. Our figure was taken, in part, from a plant which flowered at James Vere's, Esq. Kensington Gore, last December, and partly, from one in blossom about the same time, at the Hon. Lady Archer's, Ham Common. The *Musa Coccinea* grows to the height of about three, or four feet before it blows, and without question, has no rival but *Strelitzia Regina* in the hothouse, where its brilliancy, tends in some degree, to dispel the gloom of winter, for at least three months. It increases itself by suckers, which are thrown up in abundance from a vigorous plant; may be taken off at any time, and will arrive at a flowering size in twelve months; if planted in rich earth, and kept growing in pine heat, or on a strong hotbed.



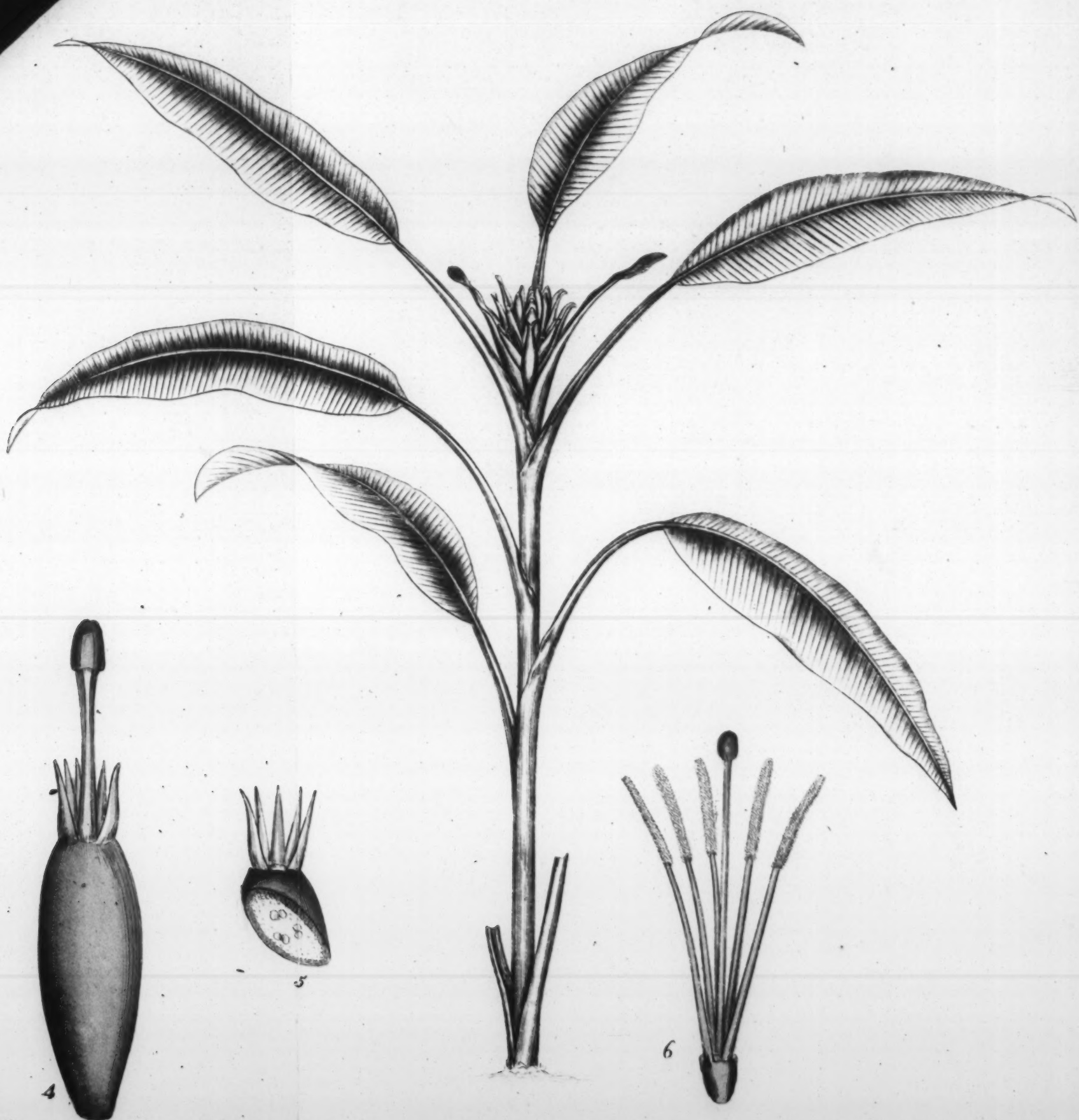


PLATE XLVIII.

IXIA BULBIFERA. *Var: flore luteo.*

Bulb-bearing Ixia. Var: yellow-flowered.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. Stigmata tria, erectiusculo patula.

BLOSSOM six petals, spreading, and equal. Summits three, nearly upright, and spreading.
See IXIA REFLEXA, Plate XIV.

SPECIFIC CHARACTER.

Ixia foliis falcatis, glabris, scapo brevioribus, axillis bulbiferis; floribus alternis, luteis.

Ixia with scimitar-shaped leaves, smooth, and shorter than the flower-stem, bearing bulbs at their insertion into the stalk; flowers alternate, and yellow.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Flower cut open, with the Chives attached.
3. The Shaft, Summit, and Seed-bud, (magnified).

THE singular sporting of Nature in the *Ixia bulbifera* is not uncommon; its viviparous character (if it may be so called) constitutes a specific difference in many genera; *Lilium*, *Lyfimachia*, &c. partake of it. The bulbs produced from the stem blow the second year, whereas those from seeds do not till the third. The flowers of this variety are the first that open, amongst the numerous species yet introduced, of this extensive genus; they are of a brilliant yellow, and seldom expand more than one at a time. The usual treatment of other Cape *Ixias* is suitable for this. The drawing was made at Messrs. Lee and Kennedy's, in the month of March 1798, they having introduced it about the year 1784.



Ixia bulbifera.
Var. *flora lutea.*

Painted by the artist J. G. Smith Feb. 1. 1895.
by H. Andrews W.S. Thuytbridge.

PLATE XLIX.
MALPIGHIA CRASSIFOLIA.
Thick-leaved Malpighia.

CLASS X. ORDER III.
DECANDRIA TRIGYNIA. Ten Chives. Three Pointals.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum, erectum, minimum, persistens, connivens. Glandulæ melliferæ duæ, ovales gibbæ, foliolis calycinis externe inferneque adnatæ.

COROLLA. Petala quinque, reniformia, magna, plicata, ciliata, patentia, concava; unguibus longis, linearibus.

STAMINA. Filamenta decem latiuscula, erecta, in cylindrum posita, parva. Antheræ cordatæ.

PISTILLUM. Germen subrotundum, minimum. Styli tres, filiformes. Stigmata obtusa.

PERICARPIUM. Bacca globosa, torulosa, magna, unilocularis.

SEMINA tria, ossea, oblonga, obtusa, angulata.

EMPALEMENT. Cup five leaves, upright, very small, remaining and closing at the points. Two honey-bearing glands, oval and gouty, are fixed to the outer and lower part of the leaves of the cup.

BLOSSOM. Petals five, kidney-shaped, large, plaited, lashed, spreading, and concave; claws long, linear.

CHIVES. Threads ten, rather broad, upright, placed cylindrically, and small. Tips heart-shaped.

POINTAL. Seed-bud nearly round, very small. Shafts three, thread-shaped. Summits blunt.

PERICARPIUM. Berry globular, knobby, large, of one cell.

SEEDS three, bony, oblong, blunt, and angulated.

SPECIFIC CHARACTER.

Malpighia foliis lanceolato-ovatis, subtus tomentosis, integerrimis; floribus terminalibus, spicatis, pallide-luteis.

Malpighia with oval spear-shaped leaves, downy beneath, and entire; flowers terminate the branches in spikes, and are pale yellow.

REFERENCE TO THE PLATE.

1. The Empalement, Chives, and Pointal, (natural size).
2. The Empalement, (magnified).
3. The Chives spread open, (natural size).
4. A Thread, and its Tip, (magnified).
5. The Pointal complete, (natural size).

ALTHOUGH, we have given to this species of *Malpighia*, the specific name under which it has been introduced; yet, there is much doubt, whether it is not the *Verbascifolium* of Linnæus; or indeed if they are not both the same plant, named from different specimens. Our species makes a very handsome hothouse plant, growing to the height of five, or six feet, before it flowers. It is a native of Jamaica, and most of the adjacent islands, and was introduced by Messrs. Lee and Kennedy about the year 1792. From the extreme tenderness of the young leaves, and shoots, it must be kept in a strong growing pine heat during the winter months; otherwise, they are subject to damp off. It is raised by cuttings, and seems to delight in a rich soil. The figure was made from a specimen communicated by the Right Hon. Lord Viscount Courtenay, in whose most superb collection at Powderham Castle, near Exeter, it flowered, for the first time in England, in the month of September 1798.



Malpighia crassifolia.

Q. 9

Sp. Pl. Vol. 1. p. 104. t. 1. f. 1. 1799.

PLATE L.

IXIA CAPITATA. *Var: flore aurantio.*

Bunch-flowering Ixia. Var: Blossom gold colour.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. Stigmata
tria, erectiusculo-patula.

BLOSSOM six petals, spreading, and equal. Sum-
mits three, nearly upright, and spreading.
See Plate XIV. IXIA REFLEXA.

SPECIFIC CHARACTER.

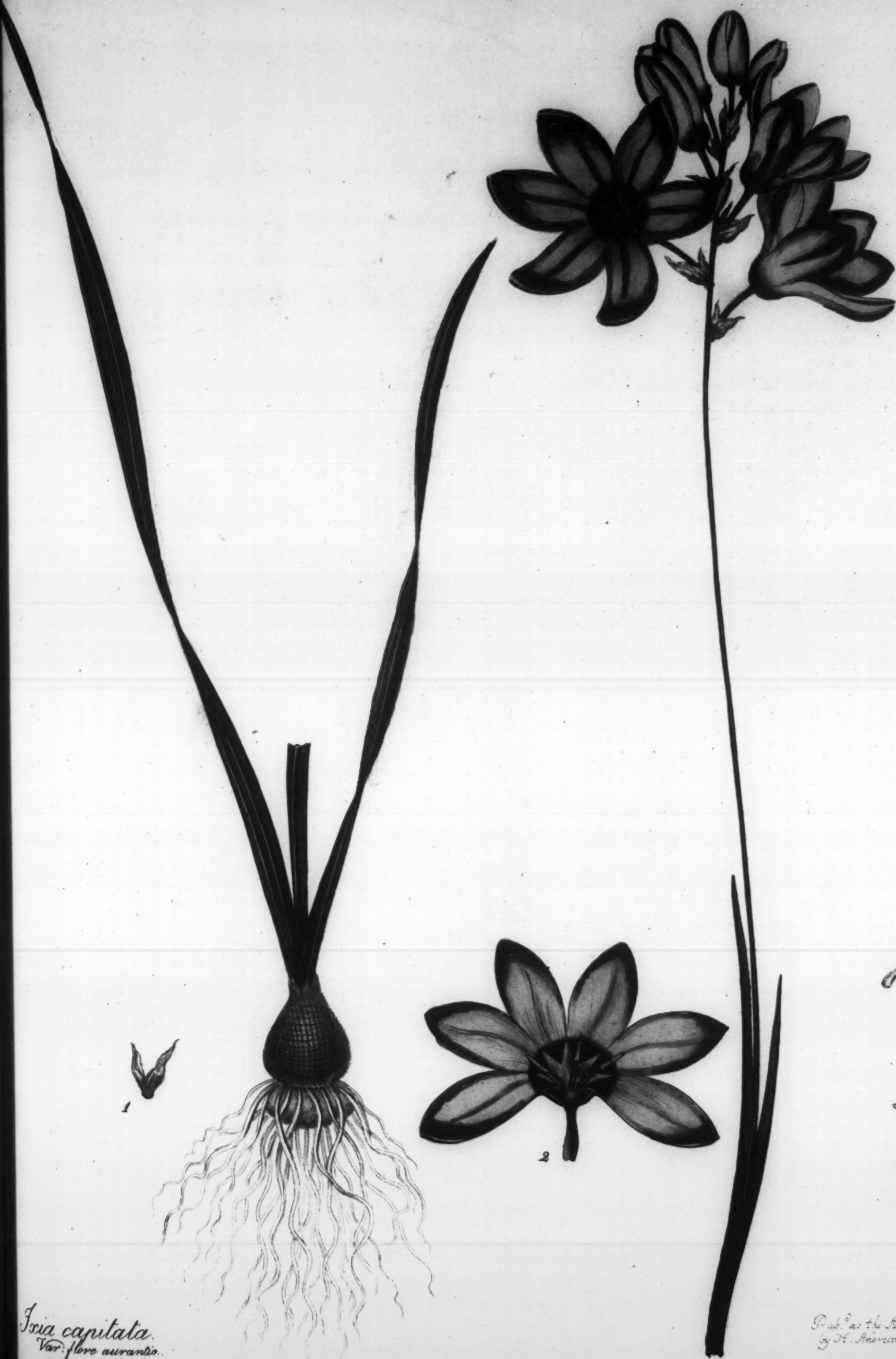
Ixia foliis radicalibus, ensiformibus; floribus
capitatis, confertis, aurantiis, petalis basi
obscuris.

Ixia with leaves growing from the root, and
sword-shaped; blossoms grow in a close
bunch, gold coloured, and the petals dark
at the base.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement.
2. A Flower cut open, with the Chives attached.
3. The Shaft, Summit, and Seed-bud, (magnified).

THIS variety of *Ixia capitata* was introduced at the same time as the *Ixia bulbifera*, flore luteo, viz. in 1784, by Messrs. Lee and Kennedy, Hammer-smith, from the Cape of Good Hope, and requires the same treatment. It flowers the latter end of May, or beginning of June; propagating itself abundantly by the root, which produces annually numerous young bulbs.



Ixia capitata.
Var. *flore aurantia.*

Pub. as the 1st direct March 1. 1799
by H. Andrews M. S. Engraver

PLATE LI. XERANTHEMUM SPECIOCISSIMUM.

Largest-flowering Everlasting Flower.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX. Communis imbricatus; squamis lanceolatis, quarum intimæ disco longiores, membranaceæ, nitidæ, radium constituentes.

COROLLA. Composita inæqualis; corollulæ hermaphroditæ plurimæ, tubulosæ in disco. Feminæ pauciores, tubulatæ, in ambitu.

Propria hermaphroditis infundibuliformis, calyce longe brevior; limbo quinquefido, patulo.

Femineis tubulosa, longitudine hermaphroditæ, quinquefida, minus æqualis.

STAMINA. Hermaphroditis filamenta quinque, brevissima. Antheræ cylindraceæ, tubulosa, longitudine fere corollulæ.

PISTILLUM. Hermaphroditis germen breve. Stylus filiformis, staminibus longior. Stigma bifidum.

Femineis germen ut in hermaphroditis. Stylus filiformis, longitudine hermaphroditæ. Stigmata duo, oblonga reflexa.

PERICARPIUM nullum. Calyx vix mutatus.

SEMINA oblonga, coronata.

RECEPTACULUM nudum, planiusculum, punctatum.

EMPALEMENT. Common tiled; scales spear-shaped, the inner ones longer than the disk, skinny, shining, and forming the ray of the flower.

BLOSSOM. Compound, unequal; florets with chives and pointals numerous and tubular in the disk. Female florets fewer, and tubular in the circumference.

Individuals with chives and pointals funnel-shaped, much shorter than the empalement; border with five clefts, spreading.

Individuals with only pointals, tubular the length of the hermaphrodites, five cleft, and rather smaller.

CHIVES. The threads in the hermaphrodites are five, and very small. Tips forming a cylinder, tubular almost the length of the florets.

POINTAL. Seed-bud of the hermaphrodites short. Shaft thread-shaped, longer than the chives. Summit cloven.

Seed-bud of the female florets the same as the hermaphrodites. Shaft thread-shaped the length of the hermaphrodites. Summits two, oblong and bent back.

SEED-VESSEL none. Empalement scarcely changing.

SEEDS oblong, and crowned with a feather.

RECEPTACLE naked, flatish, and dotted.

SPECIFIC CHARACTER.

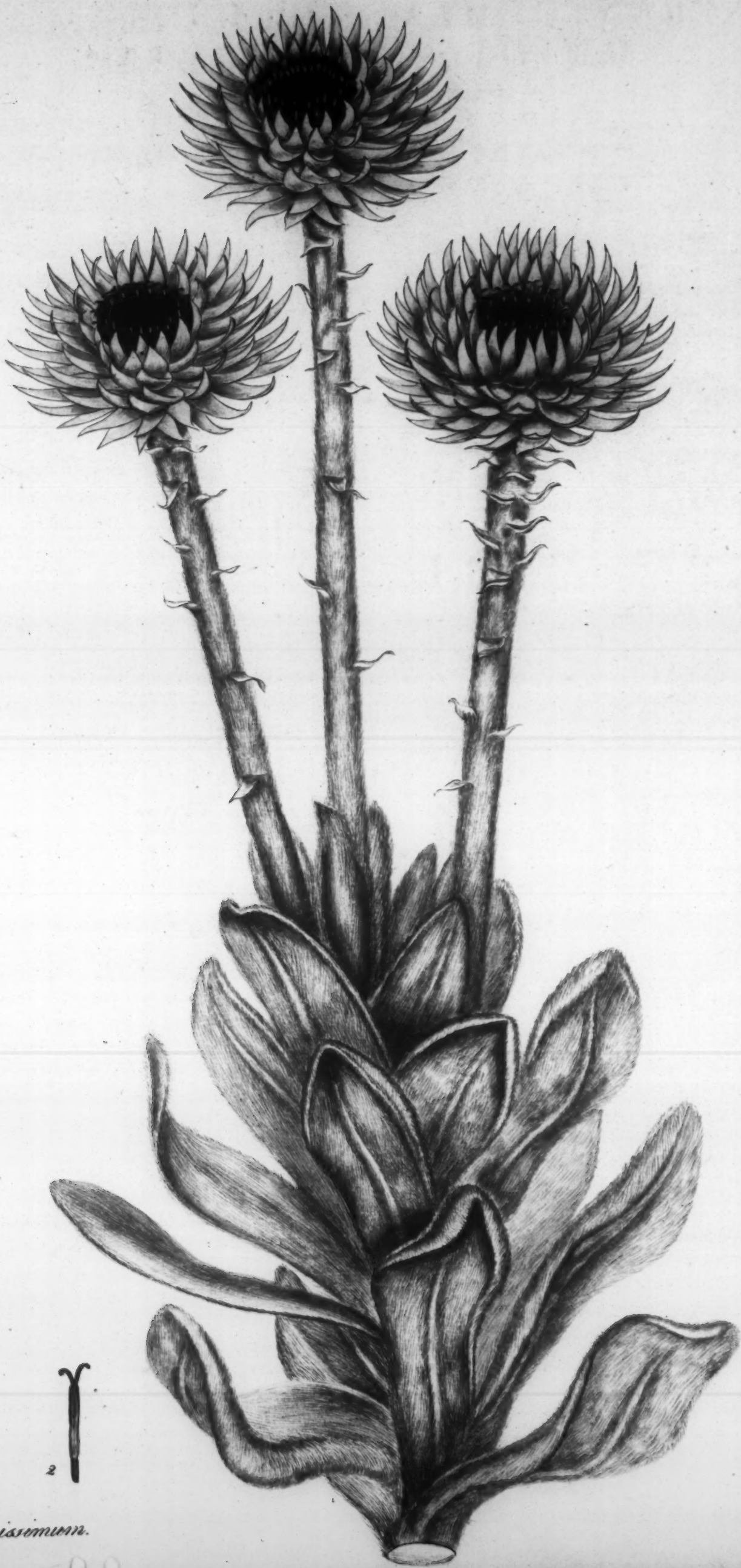
Xeranthemum fruticosum, erectum; foliis amplexicaulibus, lanceolatis, trinerviis; ramis unifloris, subundis.

Everlasting flower with an upright shrubby stem; leaves embracing the stem, lance-shaped, and three-nerved; branches with one flower, and nearly naked.

REFERENCE TO THE PLATE.

1. An Hermaphrodite floret, (natural size).
2. The Chives, Pointal, and Seed-bud, (magnified).
3. The Pointal, and Seed-bud from a female floret, (magnified).

THIS handsome species of *Xeranthemum* was introduced, according to the Kew catalogue, by Mr. F. Masson from the Cape of Good Hope, in the year 1787; it is, nevertheless, a very scarce plant, being subject to decay from our winter damps; therefore requires a dry stove for its protection. The blossoms (or rather the flower-cups, for they are the persistent parts) are easily preserved for many years, in all their brilliancy, by cutting them, when they first expand; but our atmosphere seems uncongenial to the ripening of their seeds, and is with great difficulty increased by cuttings. The soil it most approves is sandy peat, with a small portion of loam. Our figure was taken in September last year, at the Hammersmith nursery.



Xeranthemum speciosissimum.

*Pub. in the Bot. Beechey. March 1849. by H. Adams.
W. J. Knight del.*

PLATE LII. GNIDIA PINIFOLIA.

Pine-leaved Gnidia.

CLASS VIII. ORDER I.
OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, infundibuliforme, coloratum; tubo filiformi, longissimo; limbo quadripartito, plano.

COROLLA. Petala quatuor, sessilia, plana, calyce breviora, eique inserta.

STAMINA. Filamenta octo, fetacea, erecta, longitudine fere floris. Antheræ simplices.

PISTILLUM. Germen ovatum. Stylus filiformis, germinis lateri insertus, longitudine staminum. Stigma capitatum, hispidum.

PERICARPIUM nullum. Fructus in fundo calycis.

SEMEN unicum, ovatum.

EMPALEMENT. Cup one leaf, funnel-shaped and coloured; tube thread-shaped, very long; border of four segments, which are flat.

BLOSSOM. Petals four, fitting close to the cup, flat, shorter than the cup, and fixed within it.

CHIVES. Threads eight, awn-like, upright, scarcely the length of the flower. Tips simple.

POINTAL. Seed-bud egg-shaped. Shaft thread-shaped, fixed into the side of the seed-bud, and of the length of the chives. Summit headed, and hairy.

SEED-VESSEL none. Fruit in the lower part of the cup.

SEED one, egg-shaped.

SPECIFIC CHARACTER.

Gnidia, foliis sparsis, lineari-subulatis; ramis verticillatis; floribus aggregatis, terminalibus.

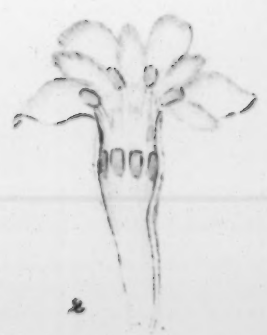
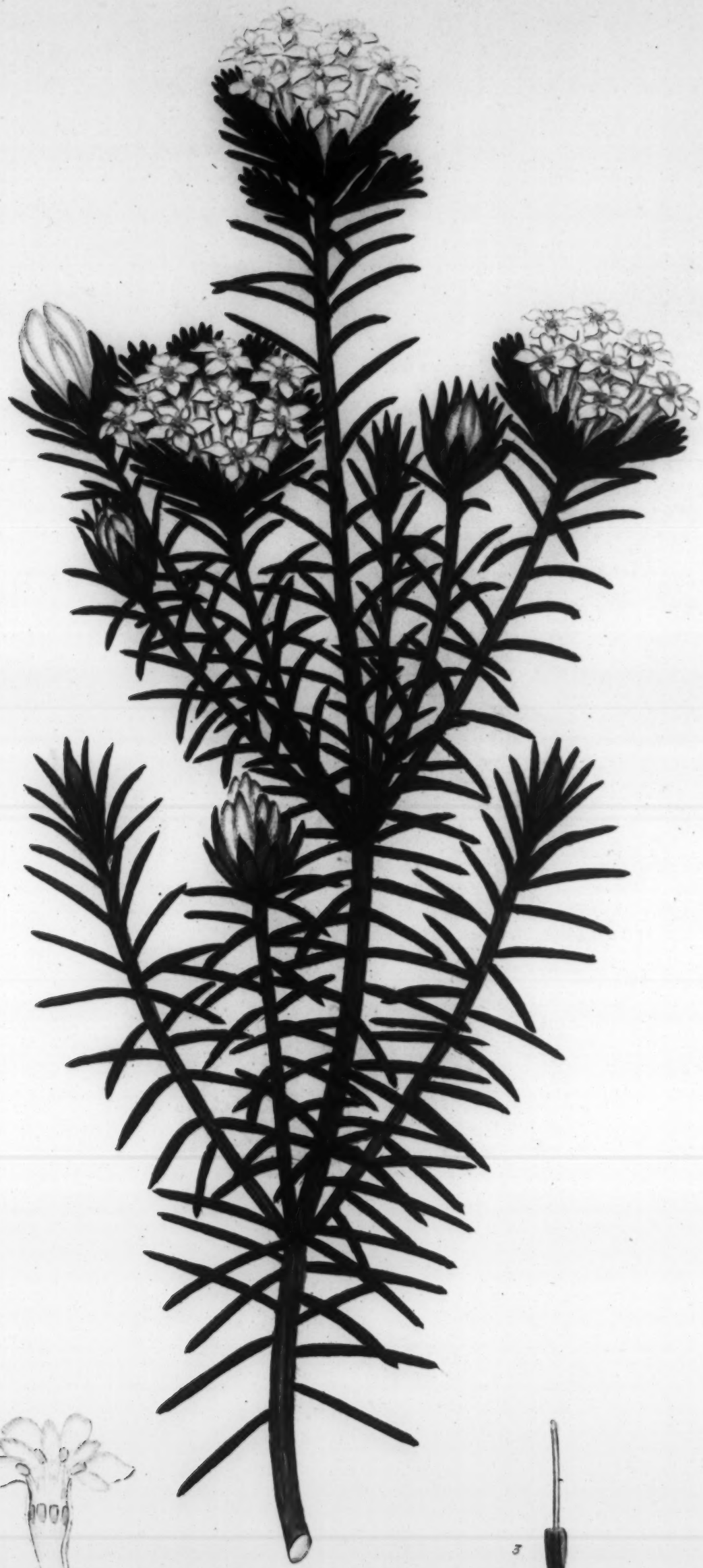
Gnidia with scattered, linearly awl-shaped leaves; branches grow in whorls; the flowers terminating the branches in clusters.

REFERENCE TO THE PLATE.

1. A Flower with its seed, (natural size).
2. The same cut open, to shew the situation and insertion of the Chives into the tube of the Empalement.
3. The Pointal, (magnified).

THE essential distinguishing character, in *Passerina*, *Gnidia*, *Struthiola*, and *Lachnæa*, must certainly be considered as amongst the slightest generic divisions made by Linnæus. It is no small difficulty to distinguish the blossom in *Gnidia*, and *Lachnæa*, from the empalement in *Passerina*, and *Struthiola*; the same exact natural structure being alike in them all; and to us, appear noticeable in their small variations, rather as forming specific, than generic distinctions. As our plan is not to alter, upon any terms, what has been determinately settled by that great master in the arcana of nature, let our opinions be what they will; we are determined to prevent confusion (which has been but little attended to of late), to give it only as such, without presuming upon alteration. But as in the present instance, when a plant long named, but otherwise unknown to cultivators, has unfortunately been foisted from its rank by another, no ways answering to the characters of the describer; we shall consider it as our particular province to rectify the mistake, however generally the error may have obtained.—The *Gnidia pinifolia* is a native of the Cape of Good Hope, the seeds having been received from thence in 1795, by Messrs. Lee and Kennedy, Hammer-smith, at whose nursery it has flowered, for the first time in England, in the month of February this year, and where the drawing was taken. It is a hardy greenhouse plant, but is propagated with difficulty by cuttings; growing to the height of eighteen inches, being most exquisitely scented by night, continuing in flower at least three months, and thriving best in a light peat soil.

A figure of the plant generally known by the name of *G. pinifolia*, will be given with the next number; to the end our assertions may be properly investigated.



Gnida pinifolia

Botanical illustration of *Gnida pinifolia* by H. Androsch, 1885.

PLATE • LIII.
MIMOSA STRICTA.

Harsh-leaved upright Mimosa.

CLASS XXIII. ORDER I.

POLYGAMIA MONOECIA. Various dispositions. Upon one Plant.

GENERIC CHARACTER.

PERIANTHIUM monophyllum, quinque-dentatum, minimum.

COROLLA. Petalum unicum, infundibuliforme, femiquinquefidum, parvum.

STAMINA. Filamenta capillaria, longissima. Antheræ incumbentes.

PISTILLUM. Germen oblongum. Stylus filiformis, staminibus brevior. Stigma truncatum.

PERICARPIUM. Legumen longum, dissepimentis transversis, pluribus.

SEMINA plurima; figura varia.

EMPALEMENT. One leaf, five-toothed, and very small.

BLOSSOM. One petal, funnel-shaped, cut half way down into five divisions, and small.

CHIVES. Threads like fine hairs, and very long. Tips laying on the threads.

POINTAL. Seed-bud oblong. Shaft thread-shaped, shorter than the chives. Summit appearing cut off.

SEED-VESSEL. A long pod, the partitions run across the pod, and are numerous.

SEEDS many; of different shapes.

SPECIFIC CHARACTER.

Mimosa foliis simplicibus, utrinque venosis, linearibus, obtusis; ramis strictissimis; capituli geminati, oppositi, ex alis foliorum.

Mimosa with simple leaves, veiny on both sides, linear, and blunt ended; branches growing close and upright; flower heads grow by pairs, opposite, and at the insertion of the leaf into the stem.

REFERENCE TO THE PLATE.

1. A Floret, (natural size).
2. The Empalement, (magnified).
3. The Blossom, (magnified).
4. One Thread and its Tip, (magnified).
5. The Pointal, (magnified).

THIS species of New Holland Mimosa, has as yet, escaped even the indefatigable, and accurate Dr. Smith; it is from Port Jackson, whence the seeds were transmitted by Colonel Paterson in the year 1793. Being easily raised, it is found in most collections; the seeds preserving their vegetative quality many years, and striking readily by cuttings. It has the peculiar character attached to the Mimosas of that country, viz. winged seed-leaves, which are lost after the first year's growth. This species has no smell, and grows to the height of three or four feet before it flowers; perfectly straight and compact, from which circumstance we have taken its trivial name.



Mimosa stricta.

Pub. on the first direct. April 1. 1799 by H. Andrews.
N^o 3. Flightsbridge.

PLATE LIV.
ALETRIS SARMENTOSA.

Creeping-rooted Bastard Aloe.

CLASS VI. ORDER I.
HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX, nullus.

COROLLA, monopetala, oblonga; limbi laciniis lanceolatis, acuminatis, erectis; persistens.

STAMINA. Filamenta sex, subulata, longitudine corollæ, inferta basi laciniarum corollæ. Antheræ oblongæ, erectæ.

PISTILLUM. Germen ovatum. Stylus subulatus, longitudine staminum. Stigma trifidum.

PERICARPIUM. Capsula ovata, triquetra, acuminata, trilocularis.

SEMINA plurima.

EMPALEMENT, none.

BLOSSOM, one leaf, oblong; the segments of the border are lance-shaped, tapering, and upright; remaining.

CHIVES. Threads six, awl-shaped, the length of the blossom, and inserted into the divisions of it, at the base. Tips oblong, upright.

POINTAL. Seed-bud egg-shaped. Shaft awl-shaped, the length of the chives. Summit three-cleft.

SEED-VESSEL. Capsule egg-shaped, three-fided, tapered, and of three cells.

SEEDS many.

SPECIFIC CHARACTER.

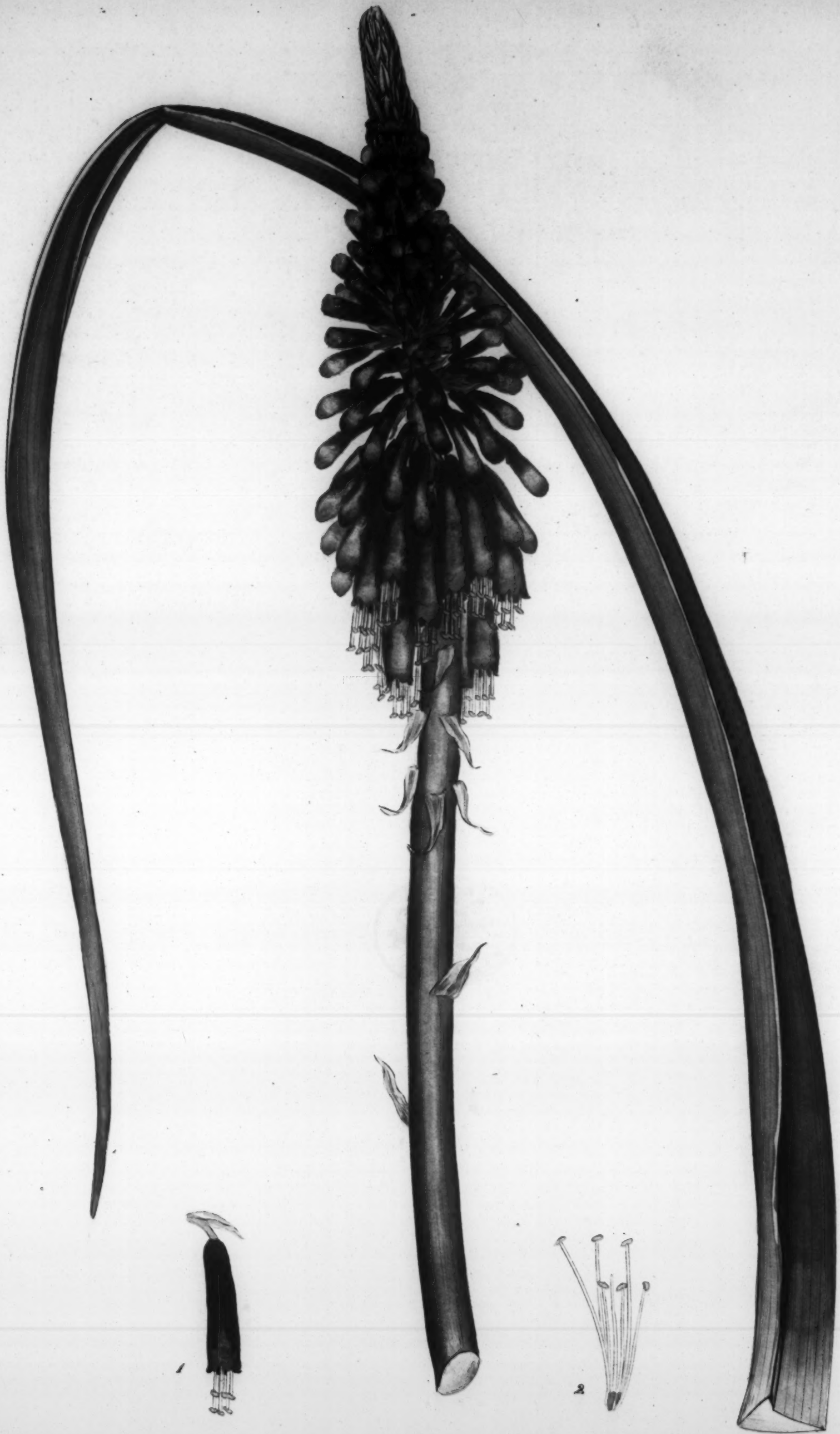
Aletris, acaulis; foliis ensiformibus, laxis; floribus spicatis, suave rubentibus; radicibus sarmentosis.

Bastard Aloe, without a stem; having sword-shaped, weak leaves; flowers grow in spikes of a soft red colour; roots producing suckers from the joints.

REFERENCE TO THE PLATE.

1. A Flower.
2. The Chives, and Pointal.
3. The Pointal.

THIS species of Aletris was introduced to us, from the Cape of Good Hope, about the year 1789; it is a hardy plant, requiring the same management as Aletris Capensis, that is, to be kept in a dry part of the greenhouse; although the plant should be frequently watered when in bloom, as should mostly all plants, notwithstanding (as in the present instance is the case) their flowering in the winter months. This caution we have thought necessary, as it is a general rule with gardeners during that season, to put as little moisture as possible to their plants, whether in flower or not, to avoid damps. The little difficulty in propagating this handsome species of Aletris, will render it soon common; the roots grow nearly horizontally, and from their joints numberless young plants are produced; which character we were desirous of expressing in the figure, as from thence we have taken our trivial name; but from the size of the work, it was found impracticable. The drawing was made in December 1798, from a plant then in flower, at the Hammer Smith nursery: we are nevertheless informed, that from being planted in a light, rich soil, it may be made to grow to the height of three feet; with a spike of flowers, one fourth the length of the flower-stem.



Alettris sarmentosa.

PLATE LV.
ZINNIA VIOLACEA.
Purple Zinnia.

CLASS XIX. ORDER II.
SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX. Communis ovato-cylindricus, lævis, imbricatus; squamis plurimis, obtusis, erectis, persistentibus.

COROLLA. Composita radiata; corollulæ hermaphroditæ plures in disco elevato. Feminæ plurimæ in radio.

Propria hermaphroditi infundibuliformis, quinquefida intus villosa.

Femineæ ligulata, subrotunda, retusa, persistentens.

STAMINA. Hermaphroditis; filamenta quinque, brevissima. Anthera cylindracea, tubulosa.

PISTILLUM. Hermaphroditis; germen oblongum, triquetrum. Stylus filiformis, femibifidus. Stigmata duo, obtusa.

Femineis; germen oblongum, triquetrum. Stylus capillaris, femibifidus. Stigmata duo, recurvata.

PERICARPIUM. Calyx immutatus.

SEMINA. Hermaphroditis solitaria, oblonga, tetragono-ancipitia. Pappus muconibus duobus.

Femineis solitaria, mutica, coronata petalo persistente.

RECEPTACULUM paleaceum; paleis lingulatis, canaliculatis, longitudine calycis, deciduis.

EMPALEMENT. Common cylindrically egg-shaped, smooth, and tiled; scales many, blunt, upright, and remaining.

BLOSSOM. Compound radiate; florets with chives and pointals, are numerous in the center, which is elevated; florets with only pointals, many in the circumference.

Individuals with chives and pointals funnel-shaped, five-cleft, and hairy within.

Individuals with pointals only, ligulate, roundish, dented at the end, and remaining.

CHIVES. Hermaphrodites; five short threads. Tips forming a hollow cylinder.

POINTAL. Hermaphrodites; seed-bud oblong, three-sided. Shaft thread-shaped, split nearly half way down. Summits two, blunt.

Females; seed-bud oblong, three-sided. Shaft hair-like, split half way down. Summits two, bent backward.

SEED-VESSEL. Cup not changing.

SEEDS. Hermaphrodites; solitary, oblong, three-sided, but sharp at two edges. Feather of two sharp points.

Females, solitary, without points, being crowned with the persistent petal.

RECEPTACLE chaffy; chaff tongue-shaped, channelled, the length of the cup, and falling off.

SPECIFIC CHARACTER.

Zinnia foliis oppositis, amplexicaulibus, lanceolatis, scabris; floribus pedunculatis, purpureis, solitariis.

Zinnia with opposite leaves, embracing the stem, broadly lance-shaped, and rough; flowers have foot-stalks, are purple, and grow solitary.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Floret of the ray with the seed attached, (natural size).
3. A Floret of the disk with the seed attached, (magnified).
4. The Chives and Pointal of an hermaphrodite floret
5. The chaffy substance dividing the florets.

THIS elegant new species of *Zinnia*, is described and figured by J. A. Cavanilles, in his first volume of Spanish plants; where he says, it is a native of Mexico, South America, and was transmitted from thence to the royal gardens, where it perfected its seeds. In the year 1796, the Marchioness of Bute received it amongst many other curious seeds, from Madrid, through the medium of Professor Ortega. Being rather a tender annual, it should be sown in March, on a gentle hotbed; and transplanted into the open borders the beginning of May. The plant grows to the height of three feet or more, and makes in the months of August and September, a very considerable addition to the splendor of the flower garden. The seeds ripen freely, though the flower should be plucked before it appears decayed.



Linnia violacea.

Painted by J. Smith May 1799.
by H. Andrews. Engraved by J. Smith.

PLATE LVI.

ANTHOLYZA SPICATA.

Spike-flowered Antholyza.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA tubulosa, irregularis, recurvata. Cap-
fula infera.

BLOSSOM tubular, irregular, and bent backward.
Capfule beneath.
See Plate XXXII. ANTHOLYZA RINGENS.

SPECIFIC CHARACTER.

Antholyza, floribus infundibuliformibus, spica-
tis, incarnato-pallidis; foliis falcatis, bre-
vissimis.

Antholyza with funnel-shaped, spiked flowers,
of a pale flesh colour; leaves scimitar-
shaped, and very short.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, to shew the insertion of the Chives.
3. The Pointal, (natural size).

THERE are few species of this genus but furnish beautiful flowers; this is certainly among the most handsome, from the softness of its colour, and the regularity of the spike: what adds considerably to its merit, is, that the blossoms remain a considerable time before they fall, which unfortunately, is seldom the case with the flowers of this genus. It was received from the Cape of Good Hope in bulbs, sent by J. Pringle, Esq. of Madeira, in 1794, to Messrs. Lee and Kennedy of Hammersmith; the drawing was made in the month of June 1797 at their nursery. Not being easily injured by damp, there is no necessity for removing it from its pot, as is necessary for most bulbs, but to increase it; one, or two young bulbs being annually produced, in addition from the old one. The best soil is a sandy peat, with a small proportion of loam.



Antholyza spicata.

Pub. by the Nat. Acad. May 6. 1799.
by H. Andrews sc. J. Nees delin.

PLATE LVII.
MESEMBRYANTHEMUM GLABRUM.

Smooth-leaved annual Fig Marygold.

CLASS XII. ORDER IV.
ICOSANDRIA PENTAGYNIA. Twenty Chives. Five Pointals.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, semiquinquefidum, superum, patens, persistens.

COROLLA. Monopetala; petala lanceolato-lineararia, numerosissima, serie multiplici nata, calyce longiora, unguibus læviter connatis in unum.

STAMINA. Filamenta numerosa, capillaria, longitudine calycis. Antheræ incumbentes.

PISTILLUM. Germen inferum, angulis quinque, obtusis. Styli quinque sæpius, subulati, erecto-reflexi. Stigmata simplicia.

PERICARPIUM. Capsula carnosæ, subrotunda, loculamentis numero styliorum respondentibus.

SEMINA plurima, subrotunda.

EMPALEMENT. Cup one leaf, cut nearly half way down into five divisions, above, spreading, and remaining.

BLOSSOM. One petal; petals linearly lance-shaped, very numerous, rising in a number of rows, longer than the cup, slightly joined together by their claws.

CHIVES. Threads numerous, hair-like, the length of the cup. Tips laying on the threads.

POINTAL. Seed-bud beneath, with five obtuse angles. Shafts mostly five, awl-shaped, upright, and a little bent outwards. Summits simple.

SEED-VESSEL. A fleshy capsule, nearly round, the cells answering to the number of the chives.

SEEDS many, nearly round.

SPECIFIC CHARACTER.

Mesembryanthemum foliis amplexicaulibus, glaberrimis, spatulatis; pedunculis longitudine foliorum; calycibus hemisphæricis; corollis luteis.

Fig Marygold with leaves embracing the stem, very smooth, and spatula-shaped; the footstalks the length of the leaves; cups hemispherical; blossoms yellow.

REFERENCE TO THE PLATE.

1. A Seed-bud; the Blossom, Cup and Chives, cut off, the Pointals remaining.
2. The same, with the Cup and Chives.

As the extreme brilliancy of this plant cannot be done justice to in painting, we must rest satisfied with having done our best; every person in the least acquainted with the art, must know, that in yellow the shining colour existing in nature cannot be retained in a drawing. This species is annual, and according to the Kew Catalogue, was introduced to the royal gardens by Mr. F. Masson in the year 1787. The seeds should be sown on a hotbed in the month of February, and by the end of August the plants will flower, and continue to blossom till the end of October; never failing to perfect their seeds.



Embryanthemum glabrum.

Fl. Ind. Austral. Nov. 1844.
by H. Deane & J. H. Stanger.

PLATE LVIII. BORONIA PINNATA.

Hawthorn-scented Boronia.

CLASS VIII. ORDER I.
OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quadripartitum; laciniis acutis, persistentibus.

COROLLA. Petala quatuor, ovata, seffilia.

Nectarium coronæ forma, excavatum, glandulosum.

STAMINA. Filamenta octo, plana, ciliata, incurvata, receptaculo inserta. Antheræ infra apicem filamentorum pedicillatæ, incumbentes.

PISTILLUM. Germen superum, conicum, quadrifidum. Stylus brevissimus, simplex. Stigma capitatum, glabrum, fulcatum.

PERICARPIUM. Capsulæ quatuor, ovato-acuminatæ, compressæ, margine introrsum coalitæ, apicibus distantibus, sutura superiori dehiscentes, bivalves.

SEMINA solitaria sæpius, nitida, reniformia, arilata.

EMPALEMENT. Cup with four divisions; segments sharp pointed, and remaining.

BLOSSOM. Petals four, egg-shaped, fitting close to the cup.

Honey-cup of the shape of a crown, hollowed, and glandular.

CHIVES. Eight threads, flat, fringed, turned inwards, and fixed into the receptacle. Tips fixed below the ends on the inside of the threads, on short foot-stalks, and lying on them.

POINTAL. Seed-bud above, conical, and four-furrowed. Shaft very short, and simple. Summit headed, smooth, and furrowed.

SEED-VESSEL. Capsules four, of a pointed egg-shape, flattened, joined by the interior edge, the points standing separate, splitting from the upper suture, two-valved.

SEEDS mostly solitary, shining, kidney-shaped, and covered with an elastic coat.

SPECIFIC CHARACTER.

Boronia foliis impari-primatis, integerrimis; pedunculis axillaribus, dichotomis; filamentis apice obtusis, glandulosis.

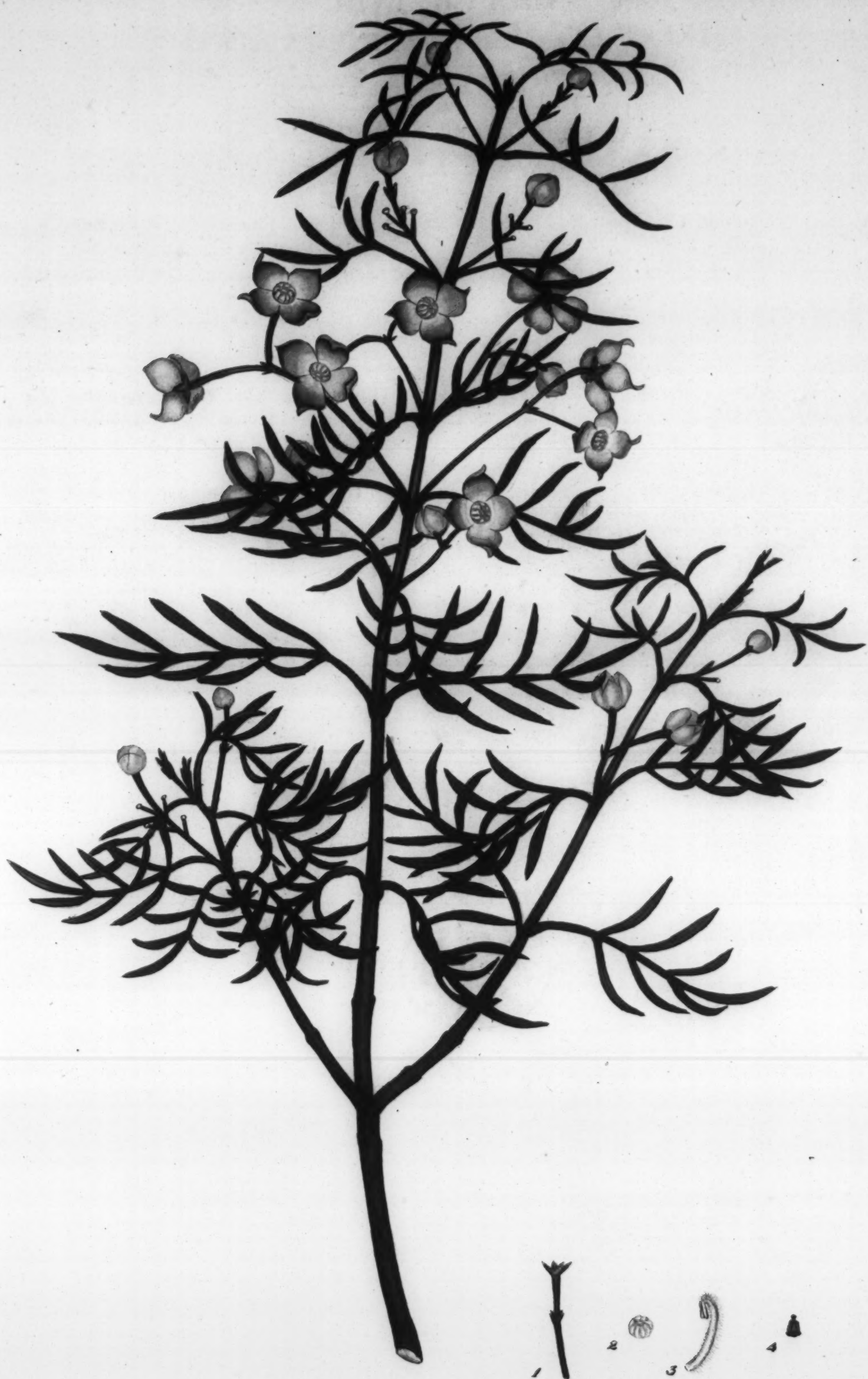
Boronia with leaves abruptly winged, entire; flower-stalks growing from the base of the leaves, forked; end of the threads blunt, and glandular.

REFERENCE TO THE PLATE.

1. The Empalement, (natural size).
2. The Chives, and Pointal.
3. One Chive, (magnified).
4. The Pointal, and Honey-cup, (natural size).

THIS is the only species yet in our gardens, of a most beautiful new genus of plants, natives of New South Wales; first named, described, and with three other species, figured in the *Tracts relating to Natural History* by Dr. J. E. Smith, F. R. S. P. L. S. &c. Thus eternizing the name of an esteemed and faithful servant, who by his ardour in botanical pursuits, had merited the honour; rejecting the usual considerations, riches, or learning, does the Dr. no less credit as a man, for the kindness of his heart, than what his distinguished talents have gained him, by placing him in the first botanical feat in this kingdom. In the short history of the unfortunate end of Borone, the Dr. informs us, he had resigned him to Dr. Sibthorpe, as a most fit person to attend him in his last journey through Greece; where, at Athens, he met his death, by an accidental fall from a balcony: the Dr. did not long survive him.

The *Boronia pinnata* has much of the aromatic flavour of *Diosma* in its leaves and stem; the flowers, which appear about February, and continue till May, have the scent of the Hawthorn flower; it grows to a shrub of the height of eighteen inches, is propagated with difficulty by cuttings, and has not hitherto perfected its seeds in this country; requiring a dry situation in the greenhouse, and flourishes most in light sandy peat. The figure was taken from a plant which flowered last year, in the nursery of Messrs. Lee and Kennedy, Hammersmith, where it was raised from seeds in 1794.



Boronia pinnata

Pub. as the Nat. history June 1. 1799.
by H. Andrews & Knightbridge.

PLATE LIX.

IXIA FISTULOSA.

Hollow-leaved Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens æqualis. Stigmata
tria, erectiusculo-patula.

BLOSSOM six petals, spreading, equal. Summits
three, nearly upright, and spreading.

See IXIA REFLEXA. Plate XIV.

SPECIFIC CHARACTER.

Ixia foliis linearibus, fistulosis; floribus secundis,
noctu fragrantibus; bulbus campanulatus,
margine acuto-fibroso.

Ixia with linear, hollow leaves; flowers pointing
one way, and fragrant by night; bulb bell-
shaped, the margin edged with sharp fibres.

REFERENCE TO THE PLATE.

1. The outer spath of the Empalement.
2. The inner spath of the Empalement.
3. A Flower cut open.
4. The Pointal, and Chives.
5. The Pointal.

THIS *Ixia* is of a very delicate nature, the root being subject to rot soon after the flower decays, if not then removed from its pot, and dried; the flowers expand about four o'clock in the afternoon, and are so extremely fragrant that they are smelt at a considerable distance. For this plant, our gardens are indebted to the Dowager Lady De Clifford, who received the bulbs from the Cape of Good Hope in the year 1794. The drawing was made from a plant, which flowered last year at Messrs. Lee and Kennedy's, Hammer-smith, who had some of them in a present from her ladyship. Like other *Ixias*, it should be planted in light peat, and watered but seldom; its propagation is but slow, as seldom more than one new bulb is produced, upon the decay of the old one.



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Ficaria viciae

Printed by J. Smith, London, 1844.

PLATE LX.
GERANIUM PUNCTATUM.

Dotted-flowered Geranium.

CLASS XVI. ORDER IV. *Suppl. System. Veget.* 1781.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata 5. Fructus rostratus, 5-coccus.		ONE POINTAL. Five summits. Fruit furnished with long awns, five dry berries. See GERANIUM GRANDIFLORUM, Plate XII.
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SPECIFIC CHARACTER.

Geranium foliis radicalibus; floribus umbellatis, diandris; petalis duobus superioribus punctatis; stigmata quatuor.		Geranium with leaves growing from the root; flowers grow in umbels, two fertile chives; the two upper petals being dotted; summits four.
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REFERENCE TO THE PLATE.

1. The Empalement cut open, with the Chives and Pointal left on, (natural size).
2. The Threads cut open, to shew their number, and the situation of the two fertile ones, (magnified).
3. The Pointal, (magnified).

PERHAPS amongst plants, there is no genus exhibits such varied and numerous species as Geranium; no one, in which the species are so allied in natural character, or so unfavourable to the sexual system, if some deviation from general rules was not allowed: the founder thought such licence necessary, and we implicitly follow him. Thus far we have thought proper to extenuate in the present instance; for should we follow Monf. L'Heritier, (as most of the modern correctors of Linnæus have done,) a new genus must inevitably be formed for this plant. Upon a close examination of the flowers, from a dozen different plants, invariably, only seven threads were found; two only with tips, and those placed immediately behind the shaft, whose summits were but four. This Geranium is rather tender, and requires a dry-stove heat to make it flower, which it will readily do with such assistance, in April; about the beginning of which month, this year, a drawing was made from a plant in the collection of Messrs. Lee and Kennedy. The roots or bulbs of this plant were first received in England by Thomas Johnes, Esq. in the year 1794, in whose magnificent conservatory at Havod they flowered the next year.



Geranium punctatum.

Pub. as the first dorsal June 1, 1899
by H. Andrews & Knightbridge.

PLATE LXI.
ASTER DENTATUS.
Toothed-leaved Starwort.

CLASS XIX. ORDER II.
SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX. *Communis* squamoso-imbricatus; squamis interioribus apice prominulis.

COROLLA. Composita radiata; corollulae hermaphroditae numerosae in disco; femineae ligulatae, decem plures in radio.

Propria hermaphroditi infundibuliformis; limbo quinquefido, patulo.

Femineae ligulata, lanceolata, tridentata.

STAMINA. Filamenta quinque, capillaria, brevissima. Anthera cylindracea, tubulosa.

PISTILLUM. Hermaphroditis; germen oblongum. Stylus filiformis, longitudine staminum. Stigma bifidum, patens.

Femineis; germen oblongum. Stylus filiformis, longitudine hermaphroditi. Stigmata duo, oblonga, revoluta.

PERICARPIUM nullum. Calyx vix mutatus.

SEMINA. Hermaphroditis solitaria, oblonga, ovata. Pappus pilosus.

Femineis similia hermaphroditis.

RECEPTACULUM nudum, planiusculum.

EMPALEMENT. *Common*, scales tiled; the inner scales standing a little out at the points.

BLOSSOM. Compound, radiate; florets with chives and pointals, many in the center; florets with only pointals, ligulate, ten or more in the circumference.

Individuals with chives and pointals, funnel-shaped; border with five-clefts, spreading.

Individuals with only pointals, ligulate, spear-shaped, with three teeth.

CHIVES. Five hair-like threads, very short. Tips forming a hollow cylinder.

POINTAL. To those with chives and pointals, seed-bud oblong. Shaft thread-shaped, the length of the chives. Summit two-cleft, expanding.

Seed-bud to those with pointals only, oblong. Shaft thread-shaped, the length of the hermaphrodites. Summits two, oblong, bent back.

SEED-VESSEL none. Cup scarcely changing.

SEEDS to the hermaphrodites solitary, oblong, egg-shaped. Feather hairy.

Females the same as hermaphrodites.

RECEPTACLE naked, almost flat.

SPECIFIC CHARACTER.

After caulis fruticosus; foliis dentatis, subtus ferrugineis; floribus terminalibus; pedunculis unifloris, bracteatis.

Starwort with a shrubby stem; leaves toothed, iron colour beneath; flowers terminate the branches; fruit-stalks having but one flower, with floral leaves.

REFERENCE TO THE PLATE.

1. A Floret of the circumference.
2. The Pointal of the preceding.
3. A Floret of the center, (magnified).
4. The Chives and Pointal of the preceding, (magnified).
5. The Shaft and Summit of the same, (magnified).

THIS plant cannot undoubtedly be considered as amongst the most beautiful of the vegetable productions of New Holland; but nevertheless, from the continuance of its flowering, is very desirable as a greenhouse plant, as it begins to expand its blossoms about December, and from that time till August is seldom seen without flowers. It is a low-growing shrub, seldom exceeding a foot in height, and very branching. Like most plants from Botany Bay, it delights in a light sandy peat soil, is easily propagated by cuttings, and seeds. The drawing was made from a plant in the nursery of Messrs. Lee and Kennedy, who raised it first from seeds in the year 1793.



Aster dentatus

Pub. in the Bot. Beechey Exped. 1847, by H. Andros.
N. S. Highmore del.

PLATE LXII.

GLADIOLUS GRAMINEUS.

Grass-like Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sexpartita, ringens.
STAMINA adscendentia.

Blossom with six divisions, gaping.
CHIVES ascending.
See GLADIOLUS LONGIFLORUS. Plate V.

SPECIFIC CHARACTER.

Gladiolus polytachyus, scapo laxo, spicis capillaribus, flexuosis; foliis ensiformibus; corollæ sexpartitæ, absque tubo.

Gladiolus with many spikes, upon a flexible flower stem, spikes hair-like, growing zigzag; leaves sword-shape; blossom of six divisions, without a tube.

REFERENCE TO THE PLATE.

1. The two sheaths of the Empalement.
2. The Seed-bud, Chives, and Pointal (magnified).
3. The Pointal, (magnified).

THIS species of Gladiolus has been described by Thunberg, and from him by Linnæus, in his Suppl. Plant. p. 95, under the specific name it here bears. It is a little straining on the genus to introduce this species into it; as it is deficient in most of the essential characters; having a blossom without a tube, and the petals equal. From the Kew Catalogue we learn it was introduced in the year 1787, by Mr. F. Masson, to the royal gardens; is there said to flower most part of the year: a plant of such character is most desirable, but unfortunately we have never seen it in blossom but at the usual season for the flowers of this tribe; that is, from April till June. The capsules of this plant bear a strong resemblance to those of the Euonymus: generally perfecting their seeds. It is a very hardy bulb, blows early, and may be kept in a pit protected from the frost.



Gladiolus gramineus.

For the best description of the structure of the flower see the description of the species.

PLATE LXIII.
USTERIA. SCANDENS.
Climbing Ustera.

CLASS XIV. ORDER II.
DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquepartitum, persistens; laciniis erectis, subulatis.

COROLLA. Monopetala, ringens, tubus ventricosus, basi arcta; limbus bilabiatus, labium *superius* bifidum, rotundatum, reflexum; labium *inferius* trifidum, laciniis rotundatis, intermedia minore.

STAMINA. Filamenta quatuor, sub labio superiori recondita, quorum duo lateralia longiora, fundo corollae inserta, basi incrassata, lanata, apice incurvata. Antherae erectae, versatiles, approximatae.

PISTILLUM. Germen sub-rotundum. Stylus filiformis, persistens; longitudine staminum. Stigma obtusum.

PERICARPIUM. Capsula sub-rotunda, bilocularis, calyce longior, obtusa.

SEMINA plurima, sub-rotunda, scabrida.

EMPALEMENT. Cup one leaf, five divisions, permanent; segments upright, and awl-shaped.

BLOSSOM. One leaf, gaping, tube swelled out in the middle, and pinched in at the base; border with two lips, the *upper* divided into two lobes, which are rounded, and bent back; the *lower* has three divisions, the segments rounded, the middle one the smallest.

CHIVES. Threads four, hid under the upper lip, of which the two side ones are the longest, fixed into the bottom of the blossom, thickened at the base, woolly, and turned inward at the point. Tips upright, slightly fixed by the middle, and approaching.

POINTAL. Seed-bud nearly round. Shaft thread-shaped, remaining, the length of the chives. Summit blunt.

SEED-VESSEL. Capsule nearly round, of two cells, longer than the cup, blunt ended.

SEEDS many, almost round, and very rough.

SPECIFIC CHARACTER.

Ustera caulis volubilis; foliis hastatis; floribus solitariis, purpureis; pedunculis tortis, longissimis.

Ustera with a climbing stem; leaves halbert-shaped; flowers solitary, and purple; fruit-stalks twisted, very long.

REFERENCE TO THE PLATE.

1. A Blossom cut open, to expose the situation of the Chives.
2. One Chive, (magnified).
3. The Pointal, (natural size).
4. The Empalement, and Seed-vessel nearly ripe, of its natural size.

THIS is another of those plants raised in the year 1797 by the Marchioness of Bute, at her charming little villa, Brompton, from seeds, sent to her ladyship from Spain by Dr. Ortega. It is a native of Mexico, North America, and will live through our winters with the protection of a greenhouse, to which it forms a beautiful ornament as a creeper; flowering from May till September, but does not appear to be a long-lived plant; is easily propagated by cuttings, or from seeds, which are ripened by November, or earlier; thriving best in light rich earth.



Usteria scandens.

Det. as the Act. deinde July 6, 1999
by H. Schubert, A. S. Knapik, and J. Knapik

PLATE LXIV.
PÆONIA ALBIFLORA.
White Pæony.

CLASS XIII. ORDER II.
POLYANDRIA DIGYNIA. Many Chives. Two Pointals.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum, parvum, persistens; foliolis subrotundis, concavis, reflexis, inequalibus magnitudine et situ.
COROLLA. Petala quinque, subrotunda, concava, basi angustiora, patentia, maxima.
STAMINA. Filamenta numerosa, capillaria. Antheræ oblongæ, quadrangulæ, erectæ, quadriloculares, magnæ.
PISTILLUM. Germina duo, ovata, erecta, tomentosa. Styli nulli. Stigmata compressa, obtusa, colorata.
PERICARPIUM. Capsulæ oblongæ, acuminatæ, reflexo-patentes, tomentosæ, uniloculares, univalves, longitudinaliter introrsum dehiscentes.
SEMINA plura, ovalia, nitida, colorata, saturæ dehiscenti affixa.

EMPALEMENT. Cup five-leaved, small, and remaining; leaves roundish, concave, bent back, and unequal both in size and situation.
BLOSSOM. Petals five, roundish, concave, smaller at the base, spreading, and very large.
CHIVES. Threads numerous, and hair-like. Tips oblong, four-sided, upright, with four cells, and large.
POINTAL. Seed-buds two, egg-shaped, upright, and downy. Shaft none. Summits flattened, oblong, blunt, and coloured.
SEED-VESSEL. Capsules oblong, tapered, bent back, and spreading, downy, of one cell, and one valve, splitting lengthways from the inner part.
SEEDS many, oval, shining, coloured, and fixed to the future where it splits.

SPECIFIC CHARACTER.

Pæonia foliis lobatis, nitentibus; corollis albidis; germinibus ternis, vel quaternis.

Pæony with leaves divided into lobes, and shining; blossoms white; seed-buds three, or four.

REFERENCE TO THE PLATE.

1. The Empalement, Chives, and Pointals.
2. A Thread and its Tip (magnified).
3. The Seed-vessels.
4. A Seed.

THIS new species of *Pæony* is a native of Mongol Tartary, and the parts adjacent; of course, is sufficiently hardy to endure our severest winters. It has been described by Gmelin, in his *Flora Sibirica*; and figured by Dr. Pallas, in his *Flora Rossica*, under the specific title it here bears. J. Bell, Esq. of Isleworth, procured some plants of it from St. Petersburg, about the year 1791; where it had been introduced by Dr. Pallas some time before, when on his travels through Tartary. It forms a handsome, upright growing, herbaceous plant; the flowers standing much above the foliage, are much handsomer before they are expanded, than when fully so; as the under part of the petals are tinged with red, which contrasted with the purity of the white of the other parts, renders them at that period extremely beautiful. The figure was taken at the nursery of Messrs. Lee and Kennedy, this year, in the month of June, during which month it is in perfection. Like the rest of the *Pæonies*, it is easily propagated by the root; requiring little attention in its cultivation, as it will live in almost any soil or situation.



Paeonia officinalis

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PLATE LXV.
OPHRYS LILIFOLIA.
Lily-leaved Ophrys.

CLASS XX. ORDER I.
GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

GENERIC CHARACTER.

CALYX. Spathæ vagæ. Spadix simplex. Perianthium nullum.
COROLLA. Petala quinque, oblonga, sursum conniventia, æqualia; duo horum exteriora.
Nectarium petalis longius, dependens; postice tantum carinatum.
STAMINA. Filamenta duo, brevissima, pistillo infidentia. Antheræ erectæ, tectæ margine interiore nectarii.
PISTILLUM. Germen oblongum, contortum, inferum. Stylus margini interiori nectarii adnatus. Stigma obsoletum.
PERICARPIUM. Capsula subovata, trigona, obtusa, striata, trivalvis, unilocularis, angulis carinatis dehiscens.
SEMINA numerosa, scobiformia.
RECEPTACULUM lineare, adnatum singulæ valvulæ pericarpium.

EMPALEMENT. Sheaths scattered. Fruit-stalks simple. - Cup none.
BLOSSOM. Five petals, oblong, approaching upwards, equal; two of them placed outwards.
Honey-cup longer than the petals, hanging down; only keeled on the back part.
CHIVES. Two threads, very short, fixed to the pointal. Tips upright, covered by the inner edge of the honey-cup.
POINTAL. Seed-bud beneath, oblong, twisted beneath. Shaft fixed to the inner edge of the honey-cup. Summit imperfect.
SEED-VESSEL. Capsule nearly egg-shaped, three-sided, blunt, channelled, three-valved, and one cell, opening at the keel-shaped angles.
SEEDS numerous, like saw-dust.
RECEPTACLE linear, growing to each valve of the seed-vessel.

SPECIFIC CHARACTER.

Ophrys bulbo subrotundo; scapo nudo; foliis ovato-oblongis, radicalibus; nectarii labio integro; petalis dorsalibus linearibus.

Ophrys with roundish roots; stem naked; leaves oblong, egg-shaped, growing from the root; the two back petals linear.

REFERENCE TO THE PLATE.

1. The Honey-cup cut off the blossom.
2. The Seed-bud and Pointal (natural size) shewn sideways.
3. The same (magnified) shewn in front, with the cap lifted up, to expose the parts of fructification.

GRONOVIVS, in his arrangement of the plants discovered by Mr. J. Clayton in Virginia, P. i, page 185, has described this plant; and Linnæus after him, in his second edition of the Species Plantarum, page 1341, has it likewise, but thought it only a large variety of a species found in marshy grounds in Sweden; however that may be, it is perfectly new to Britain, as a plant in our gardens. This species of Ophrys seems much more easy to preserve than most of its congeners, as, since its introduction, the bulbs seem to acquire additional size, and the spikes of flowers to grow larger each year. Our drawing was taken from a plant in the extensive collection of the Right Hon. the Marquis of Blandford, Bill-hill, Berkshire, in the year 1797, about the beginning of the month of July; having been sent the preceding year from Philadelphia, by J. Lyons, gardener to William Hamilton, Esq. of that State. It is a hardy plant, and will thrive in a sheltered border, if planted in light earth, and kept moist; is propagated but slowly by the root, which seems the only method; as the seeds are too small of all this natural order to raise them by that means.

PLATE LXVI.

GLADIOLUS POLYSTACHIUS.

Branching Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, ringens.
STAMINA adscendentia.

BLOSSOM of six divisions, and gaping.
CHIVES ascending.

See Plate XI. GLADIOLUS ROSEUS.

SPECIFIC CHARACTER.

Gladiolus foliis falcatis; caule polystachio; corollis sub-regularibus, carneis.

Gladiolus with cymitar-shaped leaves; stem many branches; blossoms nearly regular, and flesh colour.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, with the Chives attached.
3. The Pointal and Seed-bud, one summit magnified.

THIS species of Gladiolus has been long known in herbariums, as it is very common about Table mountain, at the Cape of Good Hope; Jacquin, Thunberg, Gmelin, Welldenow, &c. have it under the tribe of Ixia, with the specific names of Scillaris, Fabricii, &c. but notwithstanding, we have no hesitation in placing it under its true genus Gladiolus. The upright character of the chives, their infertion into the tube of the blossom, and not at the mouth, the difference in the shape of the petals, the situation of the summits behind the chives, &c. leave no room for doubt where its station should be. Although plentiful at the Cape, it has not been long an inhabitant of this clime; having flowered for the first time in the year 1797, at Bulstrode, the seat of his Grace the Duke of Portland. What contributes much to the value of this plant is, that it continues in flower at least two months, from the beginning of June till the end of July; propagates itself abundantly by the roots, which are not subject to rot, though not removed from the pots in which they have flowered. Thrives in peat earth.



Gladiolus polystachyus.

Pub. as the Nat. Director Aug. 1. 1789
by H. Andrews & Knightbridge.

PLATE LXVII.
GERANIUM INCISUM.

Jagged-leaved Geranium.

CLASS XVI. ORDER IV.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus rotatus, 5-coccus.

|| ONE POINTAL. Five summits. Fruit furnished with long awns, five dry berries.

See GERANIUM GRANDIFLORUM, Plate XII.

SPECIFIC CHARACTER.

Geranium foliis multifidis, crassis, confertis; floribus umbellatis, pedunculis longissimis; caule erecto, fruticoso.

|| Geranium with leaves of many clefts, thick, and crowded together; flowers grow in bunches, on very long foot-stalks; stem upright, and shrubby.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Chives and Pointal, (natural size).
3. The Chives cut open.
4. The Pointal, (magnified).

THIS pretty species of Geranium, from the Cape of Good Hope, is one of those having seven fertile tips; therefore a Pelargonium of Monf. L'Heritier. It is a low growing plant, seldom exceeding eight or nine inches in height, keeping very compact; but is subject to damp in the leaves, if kept moist in winter, though otherwise pretty hardy. Mr. C. Lodiges, of Hackney, first raised it from seeds which he received from Vienna, about the year 1793. It is readily propagated by cuttings, or seeds, and continues to flower all the summer months; requiring light rich earth to make it flourish.



Geranium incisum.

Det. as the *Hel. incisum* Lf. 1799.
by H. Andrews. S. J. Engelm. 1849.

PLATE LXVIII.

GOODENIA OVATA.

Oval-leaved Goodenia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA supra longitudinaliter fissa, genitalia
exferens, quinquefida. Stigma urceolatum,
ciliatum.

BLOSSOM longitudinally cloven on the upper side,
exposing the organs of generation, and five-
cleft. Summit cup-shaped, and fringed.
See GOODENIA CALENDULACEA. Plate XXII.

SPECIFIC CHARACTER.

Goodenia foliis ovatis, serratis; corollis luteis,
laciniis duobus exterioribus erectis.

Goodenia with egg-shaped leaves, sawed at the
edges; blossoms yellow, the two outer seg-
ments grow upright.

REFERENCE TO THE PLATE.

1. The Empalement and Seed-bud.
2. A Blossom, with the parts of fructification attached.
3. The Chives, and Pointal (magnified).

IN the second volume of the Linnæan Transactions, Dr. Smith enumerates ten species of the genus Goodenia; this species makes an addition to the number. The oval-leaved Goodenia is a half woody plant, making long willow-like branches, which mostly decay in the winter, though a great part of the plant remains; it is a hardy greenhouse plant, requiring little trouble either to keep or propagate; the latter of which is done by cuttings. About the year 1793, a parcel of seeds was received by Messrs. Lee and Kennedy, sent to them by Colonel Paterson from Port Jackson, New Holland; amongst them, the seeds of this plant; it nevertheless did not flower till the year 1798, about the month of June. It is certainly a desirable plant, never failing to flower from June till September, if kept growing in vigour, which it will surely do if planted in light peat earth.

*Goodenia ovata.*

PLATE LXIX.
LAMBERTIA FORMOSA. *Var. longifolia.*
Red-flowered Lambertia. Long-leaved variety.

CLASS IV. ORDER I.
TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium commune, imbricatum, squamis interioribus, longioribus.

COROLLA. *Universalis* uniformis, septem-florus.

Propria monopetala, tubulosa, limbus quadrifidus, laciniis revolutis, stameniferis.

STAMINA. Filamenta quatuor, subulata, brevissima, inserta limbo corollæ, intra singulam laciniam singula. Antheræ lineares, erectæ.

PISTILLUM. Germen subrotundum, apice pilosum. Stylus setaceus, erectus. Stigma subulatum, sulcatum.

PERICARPIUM. Capsula tricornuta, unilocularis, disperma.

SEMINA bina, alata, scabra, nigra.

EMPALEMENT. Common cup tiled, the inner scales the longest.

BLOSSOM. *General* regular composed of seven flowers.

Individuals of one petal, tubular, border four-cleft, the segments rolled back, and supporting the chives.

CHIVES. Threads four awl-shaped, very short, fixed into the border of the blossom, one within each segment. Tips linear, and upright.

POINTAL. Seed-bud nearly round, the upper part hairy. Shaft awn-like, upright. Summit awl-shaped, and furrowed.

SEED-VESSEL. Capsule three-horned, of one cell, and two seeds.

SEEDS two, winged, rough, and black.

SPECIFIC CHARACTER.

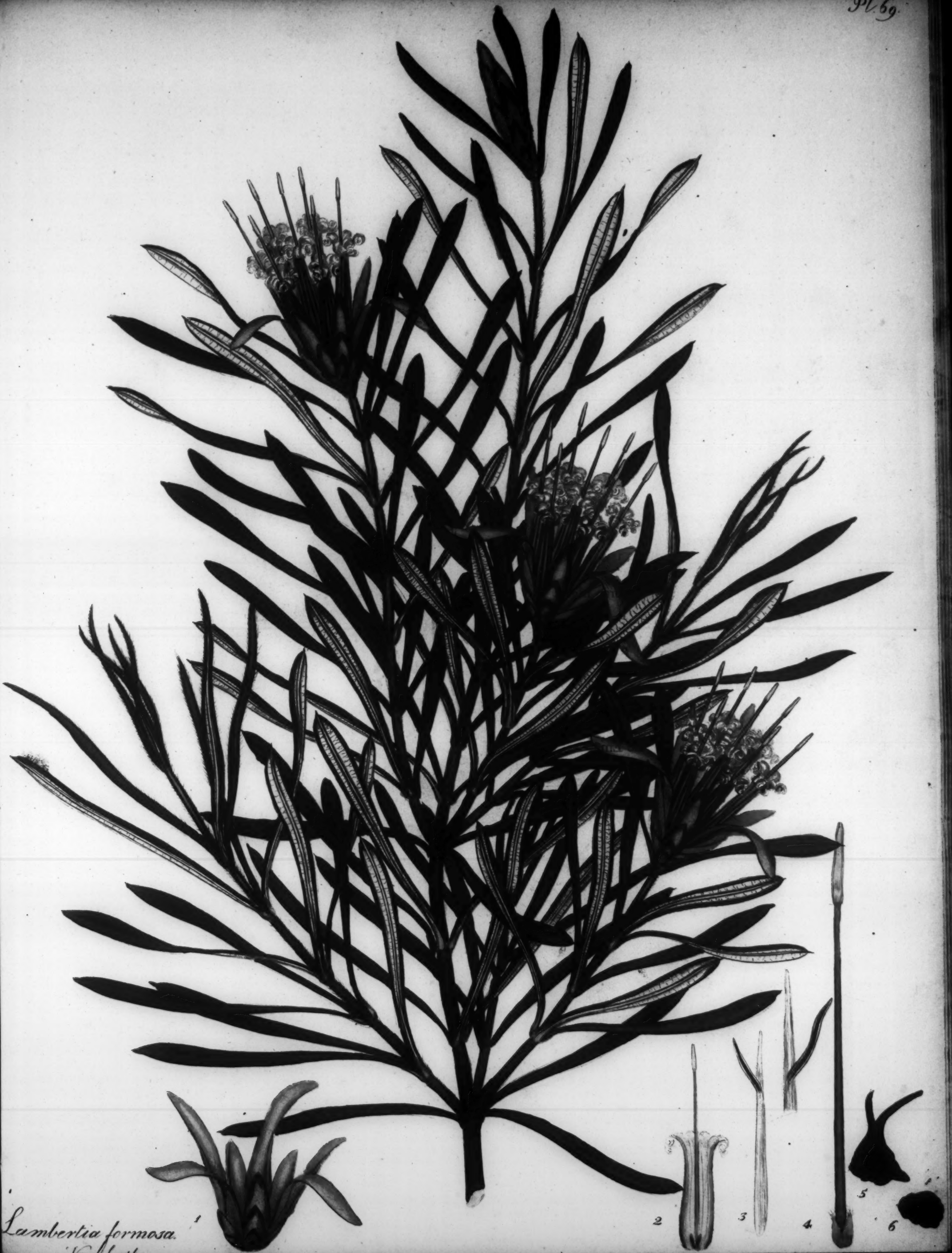
Lambertia foliis ternis, apice mucronato-pungentibus; corollis striatis, extus suave rubentibus; antheris cæruleis.

Lambertia with leaves growing by threes, the ends terminating in sharp points; blossoms striped, of a light red without; tips blue.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, with the Pointal as it stands in the blossom.
3. One segment of a Flower, with the Chive attached.
4. The Pointal (magnified).
5. A Capsule.
6. A Seed.

OF all the plants yet introduced from New Holland, that have hitherto flowered with us, this unquestionably takes the lead for beauty, considering the plant altogether. It is a hardy greenhouse plant, growing to the height of six or eight feet before it flowers; when the blossoms break from the ends of almost every branch. The seeds of this plant were among the first which arrived from Botany Bay, in the year 1788; when two varieties of it were raised by Messrs. Lee and Kennedy, at their nursery, who were fortunate enough to procure all the seeds which came home that season. This fine genus has received its title, (under the sanction of Dr. Smith, *see the Linn. Transf. page 214, vol. 3.*) from Aylmer Bourke Lambert, Esq. fellow of the Royal and Linnæan Societies; a gentleman whose zeal for the advancement of the science is unbounded, and whose labours to that end, as well as his endeavours to render botany of universal benefit, by combining the useful with the pleasing; (witness his work on the Cinchonas, or Jesuits' Barks) do him the greatest credit. Our drawing was made from a plant which flowered for the first time in this kingdom, in the collection of J. Robertson, Esq. of Stockwell, Surry, in July 1798. It is without difficulty raised by cuttings, and thrives in peat earth.



Lambertia formosa.
Var. *longistylis*

PLATE LXX.
GNIDIA SIMPLEX.

Heath-leaved Gnidia.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX infundibuliformis, quadrifidus. Petala
quatuor, calyci inserta. Semen unicum,
subbaccatum.

EMPALEMENT funnel-shaped, and four-cleft.
Petals four, inserted into the empalement.
One seed, something like a berry.
See GNIDIA PINIFOLIA, Plate LII.

SPECIFIC CHARACTER.

Gnidia, foliis linearibus, acutis, lævibus; flori-
bus terminalibus, sessilibus, luteis.

Gnidia, with linear, pointed, smooth leaves;
flowers terminating the branches, fitting
close upon them, and yellow.

REFERENCE TO THE PLATE.

1. A Flower, (natural size).
2. The same cut open, and magnified.
3. The Pointal, (natural size).
4. The same magnified.

THE flowers of this species of Gnidia, like most plants of this natural order, are fragrant, which increases much towards night. It is one of those delicate Cape plants requiring a dry stove, or an airy warm situation in the greenhouse; where it continues to flower through the months of April and May, and frequently will blossom a second time in September and October. It is easily propagated by cuttings; delighting most in peat earth, and seldom grows more than a foot high. Our drawing was made, (by his kind permission) at the beautiful and unique conservatory of R. James, Esq. Grosvenor-place, from a plant in his valuable and select collection, in May this year.

Unfortunately the G. Simplex having been introduced to our gardens before the G. Pinifolia, (see our figure, Pl. LII.) it was found in most collections under that title; but we have no hesitation in placing this plant under the specific name given it by Linnæus, in his Mantissa Plantarum of 1767, page 67; where, to the usual specific character, he has superadded an accurate description of it.

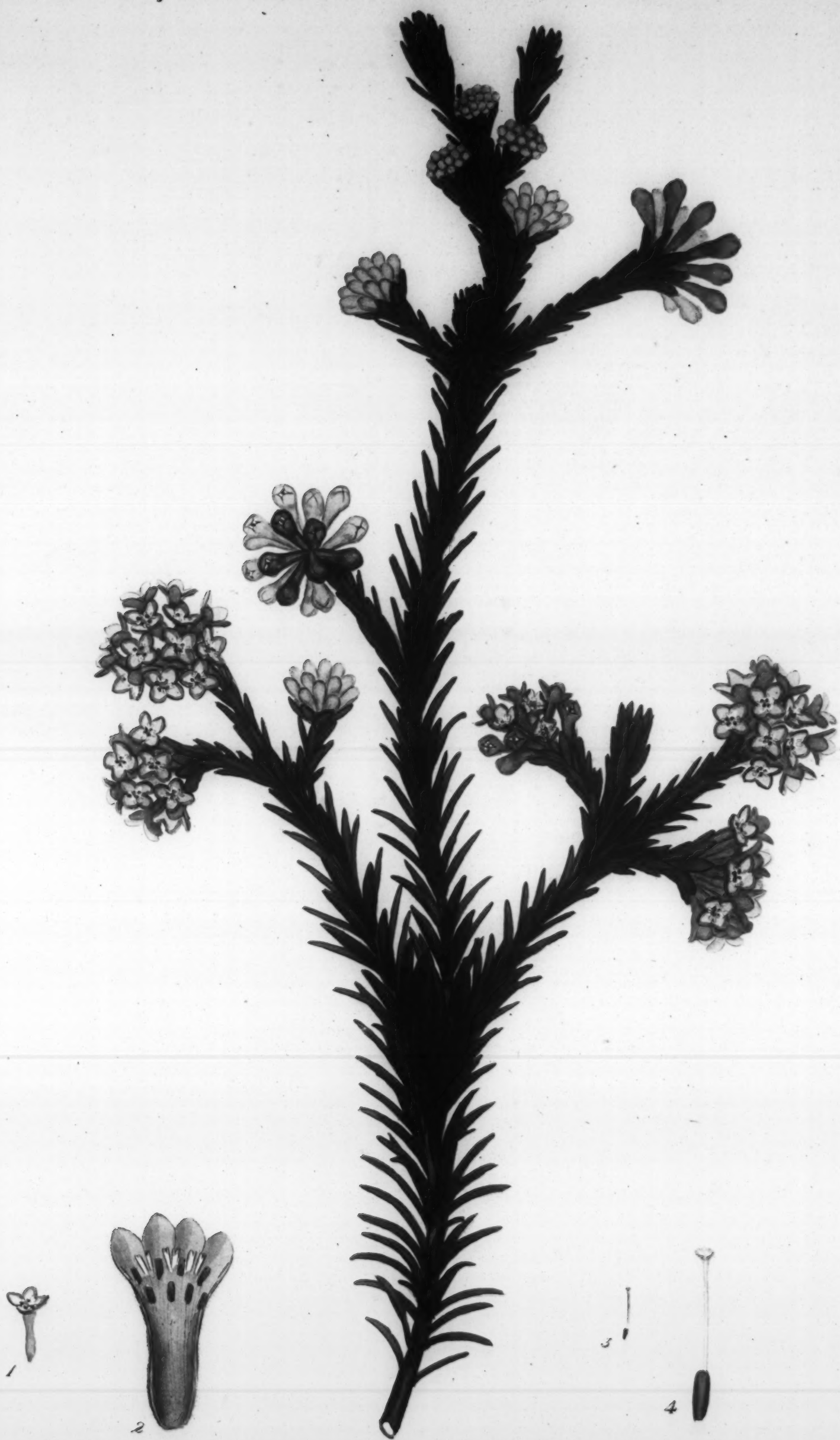
*Grindia simplex.*

PLATE LXXI.
CLEMATIS VIORNA.

Blue thick-petal'd Virgin's Bower.

CLASS XIII. ORDER VII.
POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

GENERIC CHARACTER.

PERIANTHIUM. Calyx nullus.

COROLLA. Petala quatuor, oblonga, laxa.

STAMINA. Filamenta plurima, subulata, corolla breviora. Antheræ lateri filamentorum adnatae.

PISTILLUM. Germina plurima, subrotunda, compressa, definentia in stylos subulatos, staminibus longiores. Stigmata simplicia.

PERICARPIMUM nullum. Receptaculum capitatum, parvum.

SEMINA plurima, subrotunda, compressa, stylo (figura varia) instructa.

EMPALEMENT. Cup none.

BLOSSOM. Petals four, oblong, flexible.

CHIVES. Threads many, awl-shaped, shorter than the blossom. Tips fixed to the sides of the threads.

POINTAL. Seed-buds many, nearly round, flattened, ending in awl-shaped shafts, longer than the chives. Summits simple.

SEED-VESSEL none. Receptacle forming a round head, and small.

SEEDS many, roundish, flattened, retaining the shaft, which is variously shaped.

SPECIFIC CHARACTER.

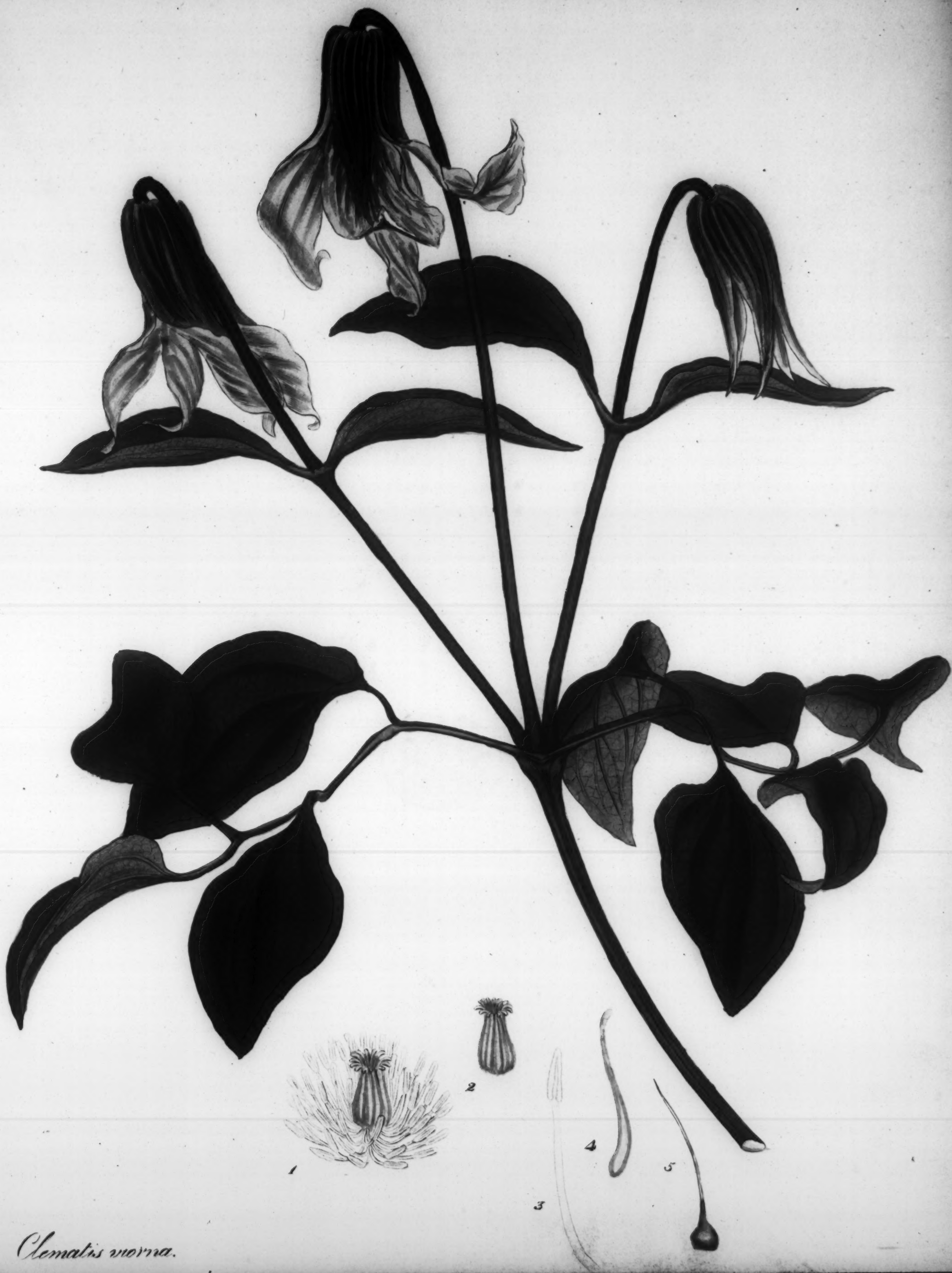
Clematis foliis compositis decompositisque; foliis quibusdam trifidis; floribus violaceis, coriaceis.

Virgin's Bower, with compound and doubly compound leaves; some of the little leaves split into three; flowers blue, and tough.

REFERENCE TO THE PLATE.

1. The Chives, and Pointals; the petals being removed.
2. The Pointals.
3. A Chive, (magnified).
4. A Pointal, (magnified).
5. A Seed nearly ripe, (natural size).

DOUBTS have been entertained, among some botanists, whether this plant is the Clematis viorna of Linnæus, as given by him, with various synonyms, in his Sp. Plan. By collating the different specific characters from the synonyms adopted by him, we have no hesitation in our decision. Being a native of Virginia and Carolina, it is not so hardy as some others from the northern parts of Europe or America; but, nevertheless, is not killed by our winters, as it is herbaceous, and not making its shoots till late. In a warm situation against a wall or trellis, it will begin to blossom in July, and continue to flower till destroyed by the frost. As yet it is rather scarce in our gardens, being but of a late introduction, though long known by description. Our figure was taken at the Hammersmith nursery, where it is in high perfection, being planted in a mixture of loam and peat earth: it is most readily increased, by parting the roots in spring; as the seeds seldom come to maturity in this climate.



Clematis vitalba.

PLATE LXXII.
STYPHELIA TRIFLORA.

Three-flowered Styphelia.

CLASS V. ORDER I.
PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

PERIANTHIUM. Calyx imbricatus, persistens; foliolis interioribus longioribus, acutis, erectis.

COROLLA tubulosa, quinquefida; laciniis revolutis, hirsutis.

Nectarium membranaceum, lacerum, germen cingens.

STAMINA. Filamenta quinque, tubo inserta. Antheræ apice bifidæ, versatiles.

PISTILLUM. Germen globosum, sulcatum, nectario cinctum. Stylus capillaris. Stigma capitatum, quinquepartitum.

PERICARPIUM. Drupa quinquelocularis, subrotunda, glabra.

SEMINA, bina.

EMPALEMENT. Cup tiled, and remaining; the inner leaves the longest, sharp-pointed, and upright.

BLOSSOM tubular, five-cleft; the segments rolled back, and hairy.

Honey-cup skinny, torn, and surrounding the seed-bud.

CHIVES. Five threads, fixed into the tube of the blossom. Tips split at the top, and loosely fixed by the middle to the threads.

POINTAL. Seed-bud globular, furrowed, encircled by the honey-cup. Shaft hair-like. Summit headed, and of five divisions.

SEED-VESSEL. A pulpy fruit with five cells, roundish, and smooth.

SEEDS, two together.

SPECIFIC CHARACTER.

Styphelia, foliis imbricatis, sparsis, glaucis, ovato-mucronatis; floribus axillaribus, ternis.

Styphelia, with leaves tiled, scattered, bluish, egg-shaped, and sharp-pointed; flowers growing from the lower part of the leaves by threes.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Flower cut open, with the Chives remaining attached, to shew their insertion into the tube of the Blossom.
3. The Pointal, (natural size,) the Summit detached, and magnified.
4. The Honey-cup, (magnified).

THE *Styphelias* constitute a very extended tribe of plants, indigenous only to New Holland; we are indebted to the pupil of Linnæus, the celebrated Dr. Solander, for this generic title, which, (as Dr. Smith has fairly observed) is expressive of the habit of this whole genus, having its origin in *στυφελός*, harsh, or hard; a character which seems invariable in every species that has come under our notice. The *S. tubiflora*, although set off by Dr. Smith, in his fourth number of *New Holland Botany*, with so much grace, must, (and we have no doubt of his concurrence) give place to *S. triflora*, which undoubtedly claims the palm from all its congeners hitherto discovered. The only specimen alive or dead, and from which our figure was taken, of this plant, which has come to our knowledge, is to be found in the extensive collection of G. Hibbert, Esq. Clapham-common; from whose exertions the exotic collections of this kingdom, are likely to acquire such considerable additions.

The *S. triflora* was raised from seed at Clapham in 1796, but did not flower till this year, in the month of June, continuing in blossom through July, and part of August. It grows to the height of near three feet, branching but little; the whole stem being hid by the leaves. Mr. Allen the gardener, to whose kind communications we are much indebted, informs us he has kept it in peat earth, and that he thinks it is to be raised by cuttings.





I N D E X

TO THE PLANTS CONTAINED IN VOL. I.

Plate 1	<i>Cortusa Matthioli</i>	Alpine Sanicle.	Har.	Herb.	May, June.
2	<i>Sprengelia incarnata</i>	Star-flowered Sprengelia.	G. H.	Shrub.	All Summer.
3	<i>Neottia speciosa</i>	Flesh-coloured Neottia.	H. H.	Herb.	March, April.
4	<i>Rhododendron Dauricum</i>	Dauric Rhododendron.	Har.	Shrub.	April, May.
5	<i>Gladiolus longiflorus</i>	Long-flowered Gladiolus.	G. H.	Herb.	June, July.
6	<i>Hemerocallis cærulea</i>	Blue Day Lily.	H. H.	Herb.	Septem. or Feb.
7	<i>Primula Cortusifolia</i>	Siberian Primrose.	Har.	Herb.	June, July.
8	<i>Gladiolus alatus</i>	Wing-flowered Gladiolus.	G. H.	Herb.	May, June.
9	<i>Atragene Capensis</i>	Cape Atragene.	G. H.	Shrub.	March, April.
10	<i>Aristea cyanea</i>	Blue-flowered Aristea.	G. H.	Herb.	July, August.
11	<i>Gladiolus roseus</i>	Rose-coloured Gladiolus.	G. H.	Herb.	May, June.
12	<i>Geranium grandiflorum</i>	Largest-flowered Geranium.	G. H.	Shrub.	July, August.
13	<i>Epidendrum cochleatum</i>	Purple-flowered Epidendrum.	H. H.	Herb.	July.
14	<i>Ixia reflexa</i>	Reflex-flowered Ixia.	G. H.	Herb.	May, June.
15	<i>Anthyllis erinacea</i>	Blue Broom of Spain.	G. H.	Shrub.	April, May.
16	<i>Azalea Pontica</i>	Yellow Pontic Azalea.	Har.	Shrub.	May, June.
17	<i>Protea formosa</i>	Coronet Protea.	G. H.	Shrub.	August.
18	<i>Correa alba</i>	White Correa.	G. H.	Shrub.	April, May.
19	<i>Gladiolus versicolor</i>	Changeable Gladiolus.	G. H.	Herb.	June.
20	<i>Echium grandiflorum</i>	Large-flowered Viper's Bugloss.	G. H.	Shrub.	April, May.
21	<i>Vercia crenata</i>	Scolloped-leaf Vercia.	H. H.	Shrub.	July.
22	<i>Goodenia calendulacea</i>	Cape Marygold-leaved Goodenia.	G. H.	Shrub.	August.
23	<i>Ixia capitata</i> Var. ovata.	Bunch-flowering Ixia. Var. egg-shaped.	G. H.	Herb.	April.
24	<i>Cineraria aurita</i>	Two-coloured-leaved Cineraria.	G. H.	Herb.	All Summer.
25	<i>Camellia Japonica</i> Var. flo. albo pleno.	Double white Camellia.	G. H.	Shrub.	Octob. Novem.
26	<i>Craffula odoratissima</i>	Sweet-scented Craffula.	G. H.	Shrub.	April, May.
27	<i>Gladiolus ringens</i> Var. cinereo odorato.	Gaping Ash-coloured sweet Gladiolus.	G. H.	Herb.	June.
28	<i>Geranium elegans</i>	Round-leaved Geranium.	G. H.	Shrub.	May.
29	<i>Ixia spicata</i> Var. viridi nigra.	Sea-green spiked Ixia.	G. H.	Herb.	May, June.
30	<i>Vaccinium Arctostaphyllum</i>	Madeira Whortle-berry.	Har.	Shrub.	July, August.
31	<i>Borbonia cordata</i>	Heart-shape-leaved Borbonia.	G. H.	Shrub.	July.
32	<i>Antholyza ringens</i>	Gaping Antholyza.	G. H.	Herb.	June.
33	<i>Diosma latifolia</i>	Broad-leaved Diosma.	G. H.	Shrub.	August.
34	<i>Chelone Ruellioides</i>	Scarlet Chelone.	Har.	Herb.	August.
35	<i>Ixia crispifolia</i> Var. flo. cæruleo.	Crisped-leaved Ixia, blue variety.	G. H.	Herb.	July.
36	<i>Rhododendron punctatum</i>	Dotted-leaved Rhododendron.	Har.	Shrub.	July.
37	<i>Geranium fragile</i>	Brittle-stalked Geranium.	G. H.	Shrub.	August.
38	<i>Gladiolus præcox</i> Var. flore rubro.	Red early-flowering Gladiolus.	G. H.	Herb.	April.
39	<i>Echium ferocissimum</i>	Prickly Viper's Bugloss.	G. H.	Shrub.	July.
40	<i>Chelone campanuloides</i>	Bell-flowered Chelone.	Har.	Herb.	August, Septem.
41	<i>Lachenalia pendula</i>	Drooping-flowered Lachenalia.	G. H.	Herb.	September.
42	<i>Orchis ciliaris</i>	Fringed Orchis.	Har.	Herb.	July.
43	<i>Bignonia Leucoxydon</i>	Oleander-flowered Trumpet Flower. ..	H. H.	Shrub.	July.
44	<i>Ixia cinnamomea</i>	Cinnamon-smelling Ixia.	G. H.	Herb.	June.
45	<i>Iris longifolia</i>	Long-leaved Iris.	G. H.	Herb.	June.
46	<i>Maffonia violacea</i>	Purple-flowered Maffonia.	G. H.	Herb.	September.
47	<i>Musa coccinea</i>	Scarlet-flowered Plantain-tree.	H. H.	Shrub.	Decem. Jan.
48	<i>Ixia bulbifera</i> Var. flo. luteo.	Bulb-bearing Ixia. Var. yellow-flowered.	G. H.	Herb.	May.
49	<i>Malpighia crassifolia</i>	Thick-leaved Malpighia.	H. H.	Shrub.	September.
50	<i>Ixia capitata</i> Var. flore aurantio.	Bunch-flowering Ixia. Var. gold colour.	G. H.	Herb.	May.
51	<i>Xeranthemum speciosissimum</i>	Largest-flowering Everlasting Flower. ..	G. H.	Shrub.	September.
52	<i>Gnidia pinifolia</i>	Pine-leaved Gnidia.	G. H.	Shrub.	Feb. March.
53	<i>Mimosa stricta</i>	Harsh-leaved upright Mimosa.	G. H.	Shrub.	March, April.
54	<i>Aletris farmentosa</i>	Creeping-rooted Baitard Aloe.	G. H.	Herb.	Decem. Jan.
55	<i>Zinnia violacea</i>	Purple Zinnia.	Har.	Ann.	August, Sept.
56	<i>Antholyza spicata</i>	Spike-flowered Antholyza.	G. H.	Herb.	June.
57	<i>Mesembryanthemum glabrum</i>	Smooth-leaved annual Fig Marygold. ..	G. H.	Ann.	July.
58	<i>Boronia pinnata</i>	Hawthorn-scented Boronia.	G. H.	Shrub.	All Summer.
59	<i>Ixia fistulosa</i>	Hollow-leaved Ixia.	G. H.	Herb.	June.
60	<i>Geranium punctatum</i>	Dotted-flowered Geranium.	G. H.	Herb.	April.
61	<i>Aster dentatus</i>	Toothed-leaved Starwort.	G. H.	Shrub.	All Summer.
62	<i>Gladiolus gramineus</i>	Grass-like Gladiolus.	G. H.	Herb.	May, June.
63	<i>Ustera scandens</i>	Climbing Ustera.	G. H.	Bien.	All Summer.
64	<i>Pæonia albiflora</i>	White Pæony.	Har.	Herb.	June.
65	<i>Ophrys lilifolia</i>	Lily-leaved Ophrys.	Har.	Herb.	July.
66	<i>Gladiolus polystachius</i>	Branching Gladiolus.	G. H.	Herb.	July.
67	<i>Geranium incisum</i>	Jagged-leaved Geranium.	G. H.	Shrub.	All Summer.
68	<i>Goodenia ovata</i>	Oval-leaved Goodenia.	G. H.	Shrub.	August, Sept.
69	<i>Lambertia formosa</i> Var. longifolia. ..	Red-flowered Lambertia. Long-leaved var.	G. H.	Shrub.	July.
70	<i>Gnidia simplex</i>	Heath-leaved Gnidia.	G. H.	Shrub.	April, Sept.
71	<i>Clematis viorna</i>	Blue thick-petal'd Virgin's Bower.	Har.	Herb.	All Summer.
72	<i>Styphelia triflora</i>	Three-flowered Styphelia.	G. H.	Shrub.	June.

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32	Aster	132	Phlox	222	Yucca
33	Aster	133	Phlox	223	Yucca
34	Aster	134	Phlox	224	Yucca
35	Aster	135	Phlox	225	Yucca
36	Aster	136	Phlox	226	Yucca
37	Aster	137	Phlox	227	Yucca
38	Aster	138	Phlox	228	Yucca
39	Aster	139	Phlox	229	Yucca
40	Aster	140	Phlox	230	Yucca
41	Aster	141	Phlox	231	Yucca
42	Aster	142	Phlox	232	Yucca
43	Aster	143	Phlox	233	Yucca
44	Aster	144	Phlox	234	Yucca
45	Aster	145	Phlox	235	Yucca
46	Aster	146	Phlox	236	Yucca
47	Aster	147	Phlox	237	Yucca
48	Aster	148	Phlox	238	Yucca
49	Aster	149	Phlox	239	Yucca
50	Aster	150	Phlox	240	Yucca
51	Aster	151	Phlox	241	Yucca
52	Aster	152	Phlox	242	Yucca
53	Aster	153	Phlox	243	Yucca
54	Aster	154	Phlox	244	Yucca
55	Aster	155	Phlox	245	Yucca
56	Aster	156	Phlox	246	Yucca
57	Aster	157	Phlox	247	Yucca
58	Aster	158	Phlox	248	Yucca
59	Aster	159	Phlox	249	Yucca
60	Aster	160	Phlox	250	Yucca
61	Aster	161	Phlox	251	Yucca
62	Aster	162	Phlox	252	Yucca
63	Aster	163	Phlox	253	Yucca
64	Aster	164	Phlox	254	Yucca
65	Aster	165	Phlox	255	Yucca
66	Aster	166	Phlox	256	Yucca
67	Aster	167	Phlox	257	Yucca
68	Aster	168	Phlox	258	Yucca
69	Aster	169	Phlox	259	Yucca
70	Aster	170	Phlox	260	Yucca
71	Aster	171	Phlox	261	Yucca
72	Aster	172	Phlox	262	Yucca
73	Aster	173	Phlox	263	Yucca
74	Aster	174	Phlox	264	Yucca
75	Aster	175	Phlox	265	Yucca
76	Aster	176	Phlox	266	Yucca
77	Aster	177	Phlox	267	Yucca
78	Aster	178	Phlox	268	Yucca
79	Aster	179	Phlox	269	Yucca
80	Aster	180	Phlox	270	Yucca
81	Aster	181	Phlox	271	Yucca
82	Aster	182	Phlox	272	Yucca
83	Aster	183	Phlox	273	Yucca
84	Aster	184	Phlox	274	Yucca
85	Aster	185	Phlox	275	Yucca
86	Aster	186	Phlox	276	Yucca
87	Aster	187	Phlox	277	Yucca
88	Aster	188	Phlox	278	Yucca
89	Aster	189	Phlox	279	Yucca
90	Aster	190	Phlox	280	Yucca
91	Aster	191	Phlox	281	Yucca
92	Aster	192	Phlox	282	Yucca
93	Aster	193	Phlox	283	Yucca
94	Aster	194	Phlox	284	Yucca
95	Aster	195	Phlox	285	Yucca
96	Aster	196	Phlox	286	Yucca
97	Aster	197	Phlox	287	Yucca
98	Aster	198	Phlox	288	Yucca
99	Aster	199	Phlox	289	Yucca
100	Aster	200	Phlox	290	Yucca



